Clinical Lecture
ON
CASES OF ANOMALOUS RHEUMATIC FEVER.

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(Concluded from p. 857.)

CASE 2. *Articular rheumatism, probably pericarditis; anasarca; heart's sounds very weak; pulse for a time very irregular; much tremor of hands, delirium, grave bronchitis; recurrence of rheumatism in hands; heart's sounds again distinct; recovery.*—E. C——, aged thirty-five, labourer, married; admitted Dec. 29th, 1880. He had been unwell about seven weeks; up to that time always had good general health. Works from 8 A.M. to 1 P.M. at a public house. For the first two weeks he felt very much out of sorts, then had violent pains in all his joints for about a week, "which made him nearly raving mad." About a month ago his feet, legs, and belly began to swell, and about the same time his breathing began to get bad, but he does not seem to have had great dyspnœa; he was always able to talk fairly well. No cough, no expectoration. At present has no pain anywhere, but a feeling of general oppression; his "heart beats like two hammers." Has been in bed at home about five weeks; was unable to lie on either side; could only lie on his back. The lips are pallid, and the face especially. Legs pit slightly at the ankles and a little above. Urine acid, thick with lithates, contains no albumen; quantity less than it was two months ago. Resonance in both fronts not quite satisfactory; air, however, enters well in right front; in the third left space the breath sound is defective, but without any distinct râle. Back tolerably but not fully resonant; breathing defective in left lung, especially at lower two-thirds, the inspiration being short and harsh. In right back the air enters tolerably well in upper half; but in the lower the entry of air is defective, and muco-crepitant râles are heard at the base. Skin of præcordia has been severely blistered. Heart's impulse weak, diffused, distinctly perceptible to the finger at the epigastrium; faintly seen at right nipple-line, but not felt. Dulness area extends up to about level of third space, as far as the right edge of sternum, and to left for half an inch beyond right nipple-line. Heart's sounds at mid-sternum are weak and distant, and very much so at vertical nipple-line in left fifth space; no murmurs. Pulse about 108, and very weak, intermission of its beats cannot well be ascertained, as the tendons twitch very much. Lower belly dull on both sides, but not at hypogastrium. Liver dulness extends from fourth space to a little below level of navel. Broth diet, beef-tea, milk. Bicarbonate of soda, one drachm; water, two ounces; effervescing citric acid, half a drachm, to be taken three times a day.—31st: Says he did not sleep for more than half an hour, is restless, something "bewilders him"; no cough at all; heart does not hammer as it did; appetite fair; tongue moist, but thickly coated, brownish-yellow in middle; bowels open four times in night after medicine, and twice this morning; both hands are excessively tremulous. Pulse irregular—96 to 112. Right radial described by clerk as wriggling with an undulatory movement, assuming an S-shape. One observer detected a high pitched systolic musical murmur at left of mid-sternum. Ordered bromide of potassium, ten grains; chloral, ten grains; tincture of opium, ten minims; water, one ounce, at bedtime. Tincture of digitalis, ten minims; carbonate of ammonia, four grains; infusion of cascarilla, one ounce; three times a day.

Jan. 1st, 1881: Slept fairly well; complains most of his ribs being sore. Bowels opened each time he had a dose of the effervescing mixture; stools very loose. It has not been given more than once or twice a day since the 31st, and is now omitted altogether. Takes food well. Tongue moist, with some yellow dryish fur. Belly measures over navel thirty-five inches and three-quarters. Both pulses very irregular as to rhythm and size of beat. Respiration 32, even, quiet; rhythm of heart irregular; dulness area as before. Tracing unequal; secondary rises very high; hyperdicrotism marked in some beats, absent in others. Heart sounds are markedly weak, but less distant; much sonorous râle in both fronts and backs; air enters very imperfectly, especially at lower backs; no dulness. He sits up well in bed. To take six ounces of port wine.—3rd: Last two nights has had: camphor, one grain; extract of hyoscyamus, five grains, in two pills. Has slept a good deal, but has been and still is now rambling and talking loudly. Pulse 120, fairly regular. Breath short; has to lie high; expectorates more mucus, a little red in one part, blackish in another. Respiration 46; lower ribs collapse during inspiration; very weak entry of air in all left back and in all right. To take decoction of senega, one ounce; oxymel of squills, one drachm; ipecacuanha wine, ten minims, every three hours.—4th: Is now and has been the whole night through constantly talking; once got out of bed; is often quite delirious; yet he is evidently now half rational, or soon becomes so. He shows me himself his expectoration; says that he has not had a wink of sleep all night, and that he has been talking about home and business matters. Says also that his back aches, and his side aches, and that he aches all over. Hands and forearms so tremulous I could not take a tracing. Pulse 120, regular, weak; face pale; takes food well. Entry of air in both backs weak, and crepitations are heard everywhere.—5th: Says he feels much better to-day. Slept a good deal in night with one grain of opium twice. Pulse 110, of fair force; expectoration very scanty; right back dull at lower fourth; left not so much; air enters left lung pretty freely, except at lower third, where a good deal of crepitation is heard; in right back air does not enter so well, and crepitations are heard everywhere; respiration 36; tongue coated and dry; bowels not open; enjoys food; pupils of good size; still talks and rambles a great deal.—7th: Bowels freely open; has had two good nights; is much more quiet; talks much less; sputa of deep orange tint; air enters lungs better, but still defectively, especially at right posterior base, where there is dulness; crepitations heard extensively in both backs. Pulse 110, weak; lies down well. Has one grain of opium every night; one grain of calomel to-night; bacon, egg.—8th: A little rambling in sleep, but nothing like what it was; legs still anasarcous, but less so. Pulse 130; heart's sounds still very weak; tongue cleaner; backs resonant except lower right; air is heard at upper backs entering tolerably well, but the lower one goes the worse the entry gets; much râle is heard at lower thirds in both, most in right; inspiratory and expiratory dry râle in both fronts; third left space rather dull; second resonant; hands steadier; his fingers appear distorted, much as in chronic rheumatism, but he says this has only come on since he has been ill; urine in good quantity, red, clear; no cardiac murmur. Iodine liniment to præcordia; half a grain of calomel and half a grain of opium three times a day; omit mixture.—11th: Yesterday had pretty copious vomiting twice, none since; last night good; feels very weak; gums at edges getting red and tumid. Pulse 108, of good volume, compressible, regular; heart's sounds weak, but distinct, second especially; urine deposits lithates copiously; is in good quantity. Takes food very well, enjoyed roast meat to-day. Lungs in much the same state; right radial curves and elongates at each beat; tongue moist, cleaner.—13th: Seems better; no dyspnœa; lies down well. Pulse 113, regular. Scarce any expectoration. Respiration 30. Heart sounds more distinct. Legs much less œdematous. Breathing much freer in upper backs, numerous crepitations in lower. Urine clear, of medium colour, alkaline. Calomel omitted. Tincture of squills, twenty minims; tincture of digitalis, ten minims; acetate of ammonia mixture, one ounce; three times a day.—15th: Pulse 110, regular, sharp, of fair force. Sleeps and eats well; wants to get up. No expectoration. Weak entry of air, with half moist crepitations in both backs; a deep inspiration does not improve breathing much; respiration 25. Ordinary diet.—20th: Yesterday weather severe, pulse excited, 117; apex beat felt at vertical nipple-line, fifth space. Saccharated carbonate of iron, one scruple daily.—22nd: At xiphoid and apex sounds are of a cantering rhythm, no murmur, no apex beat or impulse felt anywhere.—26th: Pulse very irregular two days ago; a beat was frequently too weak to reach radial. Pulse still very unequal and irregular. Anasarca gone from lower limbs some time ago. Tracing not so irregular as pulse appears. Sounds of heart pretty distinct at vertical nipple-line, fifth space; first rather weak. Ordered four grains of

carbonate of ammonia, and one ounce of infusion of cascarilla, three times a day.

Feb. 2nd: Rheumatism recurred in both hands and left shoulder yesterday, but nowhere else. Pulse regular, jerky, 110. Wrists and shoulder blistered; ordered three doses of salicylate.—7th: Pulse quite regular; temperature nearly normal. Is doing well. A whining sound of cardiac rhythm is heard at left edge of the sternum during all the respiratory period, except about end of expiration. Sounds of heart more distinct, first of a murmurish quality at the apex, but not in the left side.—10th: Tracing tall, sharp-peaked; dicrotism late. He is up and dressed, and seems going on well, but his temperature is not yet normal. Good resonance in all left back; rather weak breathing at lower part; scarce any râles. Right lung in nearly the same state.—17th: Sounds of heart much more distinct; has had a small blister at horizontal nipple-line, on account of some uneasiness in that situation. Repeat it. The whining bruit continues, but is not constant; does not accompany the natural sounds.—21st: Pulse 100, standing; respiration 20. He then went down a long flight of stairs and up again; pulse immediately after 120; respiration 18. He feels very well, except a little soreness at the left chest.—24th: Going out. Heart sounds very plainly heard through all his clothes. Taking citrate of iron and quinine, ten grains.

March 3rd: Came to hospital looking pale and not so well. Heart sounds were well heard, but not quite pure; there was no murmur with them, but some of the whining sound. Dulness area extended from left edge of sternum to about vertical nipple-line. Third left space resonant. Complains of soreness in the left chest.

April 11th: Came to the hospital; was much better; taking strychnia and pernitrate of iron.

TEMPERATURE TABLE. (CASE 2.)

Date.	T. A.M.	T. P.M.	Date.	T. A.M.	T. P.M.
Dec. 29	—	102·4°	Jan. 18	100°	102°
,, 30	102°	101·2	,, 19	99·4	99·6
,, 31	101	101·4	,, 20	100	100·2
Jan. 1	101·4	102	,, 21	99·4	99·4
,, 2	100·2	100·6	,, 22	99	99
,, 3	99·4	101·5	,, 23	98·6	99
,, 4	101·9	100·6	,, 24	99	99·4
,, 5	99·4	100	,, 25	100	100·6
,, 6	99	100	,, 26	99·8	99·8
,, 7	100·8	102·6	,, 27	99·7	100·8
,, 8	104·4	103	,, 28	98·6	100·6
,, 9	102	103	,, 29	100	99·6
,, 10	101·2	100·8	,, 30	99·6	100
,, 11	99	100·9	,, 31	100	100
,, 12	99	101	Feb. 1	99	100·4
,, 13	100	100	,, 2	100·4	100
,, 14	99·8	101·2	,, 3	99·4	100·2
,, 15	98	101·2	,, 4	99	99·8
,, 16	100·2	102	,, 6	99	98·3
,, 17	100	99·6	,, 7	99·6	98·8

CASE 3. *Rheumatic fever (second attack); failure of salicylate; mitral systolic murmur; morbilloid eruption; epistaxis; hyperpyrexia; cool packs; iced baths; delirium; death.*—A. D——, aged nineteen, porter, admitted Sept. 30th, 1878. He had rheumatic fever eight years previously, was laid up all the winter. Three weeks ago he had symptoms threatening another attack, shiverings, and much perspiration; these passed off. On Sept. 29th he was seized in the afternoon with pains in limbs and stiffness. In the morning he was so much worse that he could not dress, and was admitted to hospital in the afternoon. He cannot assign any cause for the attack. An uncle is the only relative subject to rheumatism. One ounce of salicylate of soda mixture every hour for six times.

Oct. 1st: Is a fair, robust-looking youth; skin hot and moist; has sweated profusely all night; tongue rather furred; great pain in both knees and wrists, which are swollen and very tender; heart's apex beats in fifth space in vertical nipple-line; a systolic bruit heard at apex and in carotids; vessels of neck pulsate much. Pulse 120, jerky, soft, empty between beats, especially when hand is raised; urine clear, sp. gr. 1018, no albumen. Salicylate mixture repeated, but temperature rose at night to 103·5°.—2nd: Symptoms not improved; skin very hot and moist. Pulse 106; systolic bruit at base of heart and in carotids followed by sharp second sound. Salicylate repeated.—3rd: Night very restless; he could not sleep; had no delirium; great pain in left knee and right hip, and in both shoulders; heart's apex beats outside vertical nipple-line; loud blowing systolic murmur at apex, also at base and in neck, where there is great impulse; epistaxis occurred at noon to about two drachms.—4th: Sweating very profusely; reaction of sweat neutral; urine is markedly acid; pain is very much less; had not much sleep in night; kept waking up in a fright and feeling giddy; tracing sharp-peaked, with a small shoulder in fall; dicrotic notch on basal line; extensive morbilloid rash on chest and abdomen; began early this morning to take thirty grains of acetate of potassium, twenty grains of bicarbonate of potash, and one drachm of tincture of oranges, in an ounce of water, every three hours.—5th: Says he is much worse; seems very weak and distressed; has had epistaxis to some ounces this morning; is subject to epistaxis; pulse very soft, 120; rash more developed on trunk; it consists chiefly of dull red patches, with little points of commencing sudamina. To have six ounces of port and two ounces of brandy.—7th: Was very ill all yesterday; five grains of quinine were given every two hours after 10 A.M. until evening; had about three hours sleep after a large mustard and linseed-meal poultice to chest; to-day is very restless; tongue coated in middle; pulse of good force, 112; perspiring much less; urine on 6th very acid, sweat neutral; at present skin pungently hot; third left space rather dull, second resonant; sounds of heart very weak, hardly any first sound at mid-sternum; bowels open three times this morning; is very restless now (4 P.M.), face pale, and aspect distressed. Temperature 105·4°. Has just been sick after a dose of quinine; respiration this morning 56; takes food fairly; not much articular affection. A cool pack was administered about 6 P.M. for an hour.—8th: Looks better to-day; had some sleep after first pack; a second to-day about 10 A.M. for two hours; legs and feet feel stiff and numb, has noise in his ears and deafness; is taking nourishment well; no delirium; pulse 115, large and of good force. An iced bath was given at 6.30 P.M. The temperature before was over 105° (probably); the water was at 80°; it was found difficult to reduce its temperature, though a large amount of ice was put in. At 6.45 P.M. the patient's temperature was 104·8°; at 7 P.M., 103·4°; at 7.15 P.M., 101·4°; he was then removed to bed, and at 7.25 P.M. the temperature was 98·6°. It rose again, however, quickly; at 9.45 P.M. it was 103°, and later 104·6°.—9th: He was quiet during the night, but somewhat delirious; had not much sleep; appearance better; less pallid than it was; expectorates some muco-pus; pain in joints less; can raise a cup to his mouth; seems to want sleep; tongue cleaner, moist; bowels open three times in twenty-four hours; takes nourishment well; pulse 108, of good force and volume. Between 4 and 5 P.M. he had another iced bath. The temperature fell very rapidly; in twenty minutes it fell from 104·2° to 97·4°. He was then taken out; his extremities were cold. Fifteen grains of Dover's powder and an ounce of acetate of ammonia mixture were given after the bath. He was very restless and delirious during the night. The quinine mixture was resumed.—10th: Is very much worse, extremities are cold and bluish, lips and face leaden; is very restless, continually changing his position; respiration deep and sighing, 46 per minute; pulse weak, 132; skin generally of a dusky hue; died at 12.30 in the afternoon.

Date.	T. A.M.	T. P.M.	Date.	T. A.M.	T. P.M.
Sept. 30	—	101·8°	Oct. 5	102·8°	105°
Oct. 1	102·4°	103·8	,, 6	103·8	106
,, 2	103	103·8	,, 7	105·2	105·4
,, 3	101·5	103·8	,, 8	104·8	104·6
,, 4	101·5	102·6	,, 9	104·2	104·6

Date.		Temp.	Date.		Temp.
Oct. 7	6 P.M.	105·4°	Oct. 8	9 A.M.	104·8°
,,	6.20 ,,	104·6	,,	10.30 ,,	104·8
,,	6.30 ,,	103·2	,,	11 ,,	104
,,	6.45 ,,	103	,,	12 merid.	101
,,	7·20 ,,	101·4	,,	12.15 P.M.	102
,,	10 ,,	103	,,	3.30 ,,	104·4
,,	12 ,,	105	,,	4.20 ,,	104

All in rectum. Pack at 5.45 P.M.

Post-mortem.—Rigor mortis and hypostasis well marked. A small abscess over the sternal end of the left clavicle. About three ounces of blood-stained serum in each pleura. Right lung congested posteriorly; areas of collapse scattered through the same part, disappearing on inflation. The pos-

terior parts present the early stage of brown induration. Weight of right lung 26 oz., of left 21 oz. Left lung in same condition as right, but in a much less degree. Bronchi filled with frothy mucus; their mucous membrane congested. Pulmonary artery full of dark blood. Pleuræ free from adhesions. The pericardium contained about an ounce of turbid serum. Some flakes of lymph over auricle and roots of great vessels. The heart weighed 22 oz., and contained 16 oz of clot; it was a well-marked "cor bovinum." Cardiac veins distended; arteries normal. Muscular substance on left side ⅔ in. thick, pale and soft; right side ⅓ in. thick. Left auricle filled with soft, black coagulum; cavity dilated. Mitral valve showed old thickening, and subendocardial capillary hæmorrhages at attached border; orifice 5⅛ in.; ventricle extremely dilated (left), filled with pale and dark clot, the former recent; aortic valves thickened at lines of contact and free borders, incompetent; orifice 3¼ in. Right auricle gorged with mixed coagulum and dilated; valves healthy. Tricuspid orifice 5 in.; insufficiency less marked than mitral. Pulmonary artery normal; orifice 3½ in. Vena cava superior full of dark blood. A patch of atheroma at commencement of aorta. Liver weighed 65 oz; soft, fatty; centres of lobules congested; old infarct in middle of right lobe. Spleen weighed 7 oz., soft. Kidneys 7½ oz. each; capsules peel off readily; pyramids pale and very firm.

Remarks.—All these cases were undoubtedly instances of rheumatic fever, though the phenomena they exhibited were by no means identical. This is a first point to note. "Varium et mutabile semper fœmina," says the poet. The physician may apply the epithet to disease. Not that we are to overstrain the statement, and think of disease merely as the individual sufferer presents it to us, overlooking or unheeding all that there may be common to numberless instances. But we must be prepared to meet with great variations, especially if we ply our craft under widely differing circumstances. In the first two cases the disorder receded and quitted the joints for a considerable time, during which internal organs were severely affected, and then returned for a short time to its original site as the malady declined. In Case 3 there was also marked recession of the articular symptoms when the general condition became worse, but the fatal close prevented their recurrence. Look, therefore, suspiciously on the disappearance of articular affection in rheumatic fever, unless it be attended with improvement in other respects. Pericarditis with effusion occurred in Cases 1 and 2, but the effusion was not copious. In Case 2 weakness of the heart's sounds and irregularity of the pulse were marked features. Had the physical signs indicated very large effusion, the pressure thus made on the walls of the heart would have been a sufficient cause for these phenomena, but as this was not the case it seems to me most probable that myocarditis existed. This may have either directly impaired the contractility of the heart's muscular tissue, or, as Dr. Walshe suggests (p. 260), might have enfeebled the action of the organ by influencing (inhibitorily) its nerves. In Case 1 the cardiac dulness was at one time more extensive than it ever was in Case 2, but the heart's sounds were never so weakened, nor the pulse so irregular. The anasarca of the lower limbs in Case 2, according to the evidence, was certainly of cardiac origin, and so affords additional proof of the enfeebled state of the heart. In Cases 1 and 2 delirium was a rather prominent phenomenon, especially during the earlier part of their stay in the hospital. It was tolerably acute, but not violent, and not much trouble was experienced in keeping the patients in bed. If you refer to some cases recorded in my work at pp. 169-171 you will see how very much the quality of delirium in retrocedent rheumatic fever may differ in different instances, and how much the treatment may have to be modified in consequence. The fits of restlessness and thirst which occurred in Case 1 may be regarded as of the nature of delirium. I take much the same view of the tremor of the hands and arms in Case 2, which for some time was so remarkable. The same disordered action of the cells of the intellectual centre which conditionated delirium might well in the motor centres give rise to an analogous derangement. In one familiar instance the two disorders coincide, and we have delirium tremens. Both Cases 1 and 2 had pulmonary catarrh to a serious extent, which for some time enhanced the peril considerably, especially in the latter, as the weather at the time was severely cold. The minute bronchi, if not the alveoli, were involved, and the patients might easily have succumbed from œdema of the lung. This catarrh was associated in Case 1 with an analogous intestinal disorder producing diarrhœa, and in both sites I believe resulted from the operation of the rheumatic virus, or influence, whatever that may be. Another interesting phenomenon, perhaps allied to the preceding, was the morbilloid eruption which was so marked in Cases 1 and 2. Trousseau designates such eruptions as "exanthèmes sudoraux," and thinks that they are chiefly produced by heat external or internal. Sometimes they resemble scarlatinal eruption more than that of measles, and may even be mistaken for the rash of typhus. They may occur in influenzal catarrh as well as in rheumatism, and may be very evident when pulse and temperature are normal. I have known the rashes create great and quite unnecessary alarm.

Hyperpyrexia was a prominent symptom in Cases 1 and 3, while in Case 2 it was contrastingly absent, the temperature only reaching 104°, and the average of the first fifteen days at night being only 101·4°, whereas in Case 1 the average of the first ten days (P.M.) was 103·3° and in Case 3 104·1°. We must admit, if we believe that there is a heat-regulating centre—as I assuredly do,—that this ganglion was very much more affected in the two latter cases than in the former. Just as the intellectual centres or the motor centres suffered from the morbid cause, so I conceive did the temperature-ruling centre. In many conditions of this kind the weakest part, that which has least stability, or power, or resistance, which is most vulnerable, suffers most, and the symptoms, the evident phenomena, are shaped accordingly. To check the hyperpyrexia cold baths were employed, ten of which were administered in Case 1 from Dec. 28th, 10 P.M., to Jan. 1st, 12 P.M. Their general effect was decidedly beneficial, though it often was very brief, the temperature quickly regaining its former height. Several of the later baths, especially the last, were of short duration, as they were not well borne; the last was followed by too much prostration to make a repetition desirable, and sponging was substituted. The subjoined table exhibits pretty clearly the effects of the baths on the temperature.

After the tenth bath the temperature was only once above 103° for twenty-four hours. On January 3rd (twenty-six hours after the last bath) it reached 104·8° at 2 A.M., and was only two-tenths lower at 4 A.M.; it then fell, and did not reach 104° again for twenty-four hours. After 4 A.M. Jan. 4th it sank, and remained below 104° and mostly below 103° for 116 hours; then marked 104° at 2, 4, and 6 A.M. of the 9th, again fell and remained at or but little above the normal for eighteen hours. At midnight of the 9th it ran up to 105°, and in spite of sponging did not fall materially for ten hours, marking 104·8°, 102·6°, 105°, 104°, and 104·6° at two-hour intervals. This, however, was the last gust of the storm, if we except one reading of 104° on Jan. 18th at 4 P.M., and one of 103·2° on Feb. 6th at 2 A.M. These brief recurrences of fever during an apyretic period appear to me very interesting, and can scarcely be accounted for except on the view that the heat-regulating centre at these times suffered a transitory paresis. Similar occurrences are met with in various morbid states. After Jan. 20th the biboral observations were discontinued, and only five, four, or three taken in each twenty-four hours. During all this period, extending to March 17th, the temperature was normal, or nearly so. In Case 3 the baths were employed too late; they should have been commenced on the evening of the 5th, when the temperature reached 105°, and should have been repeated whenever it rose above 103°. The packs were insufficient for the wants of the patient.

The other remedies which we employed with the view of reducing fever—viz, salicylate and quinine—had no good result. The former produced much diarrhœa, and the latter on the last occasion when it was given in pretty full dose caused a rigor, with vomiting and purging. It is true that the doses of quinine were much less than those recommended by some high authorities—Jurgensen for instance; but such experience as I have had of the antipyretic action of quinine in acute non-malarious disease has not been favourable. It has lowered the temperature for a short time, but has otherwise seemed rather injurious. Dr. G. Smith, however, has seen much better results.[1]

Besides controlling pyrexia our efforts were mainly directed to maintain the force of the heart, to support the general strength, and to procure sleep. In carrying out these aims digitalis and opium were of real efficacy. Perhaps, however, the favourable issue of the malady was determined chiefly by the good behaviour of the stomach,

[1] Vide Practitioner, 1878.

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which stood its ground bravely when most other organs were more or less disordered. I am often tempted to modify the apophthegm, *φυσεως αντιπραττουσης κενα παντα*, by substituting *Γαστερος* for the first word. You will surely find it a part of wisdom to make much of the stomach, and sedulously to avoid giving it offence. In Case 2 digitalis and opium and the expectorants served us well, and so, also, I think, did small doses of calomel three times a day. In Case 3 I am much disposed to think opium should have been used more freely. Judiciously employed, it certainly sustains failing nerve-power. The bedsore in Case 1, which threatened at one time to perforate the spinal canal, was dealt with successfully by keeping the lad lying on his face, and by applying carbolic lotion under tenax.

ON HOSPITALS:

THEIR MANAGEMENT, CONSTRUCTION, AND ARRANGEMENTS IN RELATION TO THE SUCCESSFUL TREATMENT OF DISEASE, WITH REMARKS ON THE ORGANISATION OF MEDICAL RELIEF IN THE METROPOLIS.

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GENERAL INTRODUCTION.

SINCE the institutions devoted to the relief of suffering from disease and accidents have ceased to possess an exclusively ecclesiastical character, and become what they now are, and long have been, part and parcel of the general practice of charity and benevolence, in their purest forms, hospitals, with special reference to the successful treatment of those admitted within their walls, have scarcely kept pace in their construction and management, with the advance of civilisation in other branches of social economy. The present conditions of life in all civilised communities impose a strain upon mind and body by day and by night which is extremely difficult to bear, without serious risk of premature decay and death. The ever-increasing dangers to life and limb from the continuous and progressive multiplication of mechanical contrivances to supplement and supplant manual labour, and to annihilate time and space, have imported into Surgery fresh forms of accidents and injuries, and new pathological states resulting therefrom, which tax the highest resources of the science and art of the surgeon, to contend with and counteract. The gravitation of rural populations to urban centres, the result of new conditions of society, has caused the aggregation of human beings upon areas insufficient to maintain them in health and strength, without the aid of complex artificial contrivances. These conditions, with the insanitary surroundings inseparable from them, especially among the poor and improvident, coupled with the vices which are largely the outcome of undue pressure of population upon space and the means of subsistence, have become important factors in changing the form and character of many diseases, more especially those of the inflammatory and zymotic classes. This state again demands the employment of the most advanced means which scientific progress has placed at the command of the physician, to deal with successfully. All the above conditions, with a multitude of collateral circumstances intimately connected with them, invest hospitals with even greater interest and importance now, than they have ever previously possessed. Not only are they "Nature's schools where pupils are taught her ways in diseases and casualties, and the effects of the application of the means of relief," but they are emphatically the only places in which all the phases and varieties of sickness, whether of new or of old types, can be studied in a strictly scientific manner. The administration of the active principles of curative substances when separated from the inert or injurious matters with which they are combined in their natural state; the proper employment of anæsthetic and antiseptic agents; the skilled use of all new physical and mechanical contrivances for the detection, treatment, and removal of disease and its consequences, in circumstances where they can be subjected to the strictest observation and control; and, above all, the pursuit of pathological inquiry in the manner absolutely necessary for the advancement of science, are among the most important uses of hospitals.

The present, again, is an exceptionally appropriate time for the consideration of the question in all its bearings. An International Congress will shortly be held in this great metropolis, and probably collect a larger assemblage of medical men than has ever before been gathered together in London, from all parts of the world. Those to whom our institutions are at present unknown, and many to whom they are familiar, will doubtless visit them and contrast our methods of managing matters, with the prevailing practice in their own countries. It is much, therefore, to be regretted that in the questionable multiplication of sections and embarrassing accumulation of questions for discussion, most of them having no international bearings, room has not been found for that of the construction and management of hospitals, and a uniform general system of record of sickness and mortality for the hospitals of all countries. Great doubts, apparently on good grounds, exist among ourselves as to the advantages and disadvantages of large hospitals as compared with small; as to the real causes of the persistent unhealthiness of many of those institutions, both new and old, whether dependent on structural or other conditions; and as to the best means of securing all the conditions necessary to minimise the risk to life, of those who seek admission or are taken to them. There is by no means universal consensus on this and many similar questions, connected with hospitals. It would, therefore, have been invaluable to obtain upon them the views of the eminent practical workers in kindred institutions in every part of the world, after personal examination of all that we have to show them. Some nations have advanced beyond us in the matter, as I shall endeavour to show anon; and I still hope, in spite of the regrettable omission which I hold to have been committed, that their representatives will, on their return to their several homes, place their impressions on record in a form that will be valuable to us as warnings or examples.

The primary function of hospitals is the successful treatment of diseases and accidents, in the strictest relation to the interests and advantages of the sick and stricken individually. To this all other relations, scientific and administrative, must be absolutely subordinated, in spite of the widespread popular belief to the contrary, particularly as respects clinical hospitals, or hospitals forming part of medical schools. What, then, are the cardinal conditions to be observed in the construction, management, and distribution of hospitals to fit them for their special purposes in all the important relations in which they stand to the public, and to the profession most immediately concerned in their efficiency? It was truly said by one of our most eminent surgeons, Sir William Blizard, nearly a century since, that "the value of medical science in every walk of life, independently of its application in preventing and curing disease, should be seriously considered. All men are indebted to the discoverers and cultivators of natural truths for some share of their useful knowledge, and of the felicity they enjoy. Many, therefore, are the objects, interesting to society, that present themselves in contemplating the professional concerns of a hospital, and, as in commercial and other affairs of life, they will be best understood by men who have most devoted their time and attention to the subject. Everything liberal may be expected where charity is the governing principle of action, and where the good done bears proportion to the degree of knowledge exercised. Purity of motive, sincerity of attention in the surgeons, will not then be doubted. It may not, however, be improper to observe that their credit and interest are involved in all the proceedings of a hospital; for its prosperity is their elevation, its depression their loss and regret."

To consider, then, this important question correctly it seems to me to be desirable to group hospitals roughly into certain classes, and then to discuss in as much detail as may be necessary to their right understanding, the general attributes which are common to all, and those which are more or less restricted to the special purposes of each group, the successful treatment of disease being the cardinal condition, or *raison d'être*, of every such institution.

The simplest arrangement of all hospitals actually in existence is the following:—

1. Clinical hospitals, or hospitals attached to or forming parts of medical schools.

2. General hospitals, or those in which all classes of cases,

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medical and surgical, are treated, with or without detached wards for infectious diseases, and parturition. In this group, I think, should be placed the great separate workhouse infirmaries, for reasons which will be mentioned when they come under review.

3. Special hospitals, such as fever and small-pox hospitals, lying-in hospitals, ophthalmic, skin, orthopædic, and other institutions devoted to specific purposes, usually indicated by their names.

4. Cottage hospitals.

5. Convalescent hospitals.

Each of the above groups, again, needs to be considered with reference both to institutions now in existence, and to the hospitals of the future. From them I have excluded dispensaries, free or provident, and all institutions which have no beds for taking in patients. These, with the out-patient departments of all hospitals, which might, I think, with advantage in many cases be separated from them, are most important complements of our hospital system, and, with the home treatment of such cases as are adapted for it, render it complete in organisation. But the latter scarcely fall within the scope or purpose of my contention.

The first step in the whole inquiry is to determine as far as possible what constitutes a healthy hospital, for this is universal in its application. In one of his classical reports, Mr. Simon has defined a healthy hospital to be "a hospital which does not *by any fault of its own* aggravate ever so little the recovery of persons who are properly its inmates, and this, the only right sense of the absolute word, governs the words comparative applications; so that when we compare them together with regard to their 'healthiness,' and call one of them the 'unhealthier' hospital, our meaning is that in this hospital, by means of some faults of its own, disease cannot be treated as successfully as in the other hospital; and the fault of its own, through which an 'unhealthy' hospital fails to attain the best results for its medical and surgical treatment, is of two kinds—either it is an *inherent fault*, as of site and construction; or else it is a *fault of keeping*, as dirtiness, or overcrowding, or neglect of ventilation."[1] Various attempts have been made to solve the question of the healthiness of hospitals as compared with each other, by contrasting the results chiefly of surgical practice, by an appeal to statistics. This doubtless is the true means of forming a correct judgment on all such questions as can be solved by the application of the numerical method. When figures are really exponents of facts, and are collected with mathematical accuracy, they "formulate the past, render the present fruitful, and prepare the future." But the terms of all comparisons, to be exact, must be identical, as dissimilar things cannot be compared in the strict sense of the word. Vital phenomena are so complex in their nature, whether in health or disease, and are influenced by so many collateral conditions, all of which require to be stated with minute care and accuracy, that the basis of a correct statistical comparison of the results of the practice of different hospitals, does not at present exist. Nowhere are the records of hospitals so kept as to afford more than a rough approximation to the truth, which has no pretension to scientific accuracy. In each and all of them some important factors are omitted, and in none that I am acquainted with, are any statistics of therapeutics or particular plans of treatment properly kept. That these latter exert an important influence in determining the results of medical and surgical treatment in hospitals, independent of all internal faults of their own, who can doubt who has watched and noted the changes in doctrine and practice of the present century, from the heroic bloodletting and *nimia cura medici* of its early part to the medicine expectante, homœopathy, hydropathy, and the important antiseptic surgery of our own times?

It is sufficient for my present purpose to state that, although we have no sound comparative data to guide us to a strictly logical conclusion, we have an abundance of testimony from figures which are of considerable value in themselves, in relation to many medical and surgical questions of great importance. Taken by themselves, they show that when varying proportions of mortality occur from the same classes of surgical procedure in similar cases, in the same or different localities, or where the death-rates from fever, inflammation, the process of parturition, and other general causes range to an extent indicative of greatly increased risks to life in some circumstances as contrasted with others, they point to the existence of something wrong. This *something wrong* demands the strictest investigation, and this is the real position in which the question now is. What, then, are the different factors which require to be taken into account in estimating the general conditions of healthiness in the sense used by Mr. Simon, or the reverse, of every hospital intended for the reception of the sick or disabled? As usual in all human affairs, the agencies to be considered are moral and material. The former refer to those employed in the control, direction, and management of hospitals; the latter relate to structural and other conditions which we know, or believe, to contribute to placing such institutions in the best possible state to fulfil their special purposes. It is manifest, and to this general rule hospitals form no exception, that the best and most perfect instruments may fail in careless or incompetent hands, whilst good work may be done with imperfect instruments by the more skilled and careful.

The question of the government and staff of hospitals is thus scarcely second in importance, to the principles which should be observed in their construction and arrangements.

For convenience of treatment I shall consider the whole subject under the following heads:—

1. The control and management of hospitals.
2. The construction and arrangements of hospitals, with descriptions of the most typical examples of recent hospitals.
3. The consideration of the several groups of hospitals.
4. The organisation of medical relief in the metropolis.

In connexion with this will be published, on the 16th of July, a Map of Medical London, showing the exact position of every hospital of every class in it at the present time.

Lastly, the general conclusions to be deduced from the above.

(To be continued.)

[1] Sixth Report of the Medical Officer of the Privy Council, 1864. Pp. 39, 40.

ETIOLOGY AND CLINICAL BEARINGS OF THE GERM THEORY OF DISEASE.

BY DR. GEORGE HARLEY, F.R.S.

The Editor calls attention to the following:—

Note by the Author.—"Reformed speling: This paper is printed without encumbering its words with redundant, and consequently useles, duplicated consonants."

It must be understood that THE LANCET does not adopt the method, but simply complies with the request of Dr. Harley.

SINCE one may now venture to say, without much dread of contradiction, that science is begining rapidly to become the director of the general practitioner, as wel as the handmaiden of the consultant, and that in exact proportion as she apears in the sick-room does routine practice and empirical rule-of-thumb prescribing vanish, no apology need be ofered for my bringing under the notice of the profesion a few new facts which tend to elucidate the germ theory of disease. For it seems as if we were already hovering on the very brink of at least finding a truly philosophical explanation to what has hitherto been considered the totaly unacountable apearance of sporadic cases of contagious and infectious diseases, as wel as an equaly philosophic solution to the cause of the waves of epidemic afections which ever and anon aweep over and diseminate, in diferent forms, and at diferent times, diferent portions of the earth's surface during varying and hitherto inscrutable periods of time, and, after completely disapearing from a locality, reapearing in it again after longer or shorter intervals, and that, too, generaly in the same form, and oftentimes even under almost identicaly similar circumstances.

Moreover, I believe when the germ theory is properly and completely worked out, that it wil not only yield a philosophic clue to the suden outbreaks and equaly rapid cesation of epidemics, and the ocasional apearance of fatal sporadic examples of disease, but explain the *rationale* of the longer or shorter periods of incubation which folow upon the heels of infection and contagion, the causes of periodicity in the malarial group of afections, and lastly, the inexplicable phenomenon of the long intervals of quiescence in particular localities between the termination of one epidemic and the outbreak of another, which is so characteristic of

virulent plague and Asiatic cholera, without necessitating the adoption of either the untenable theory of spontaneous generation or the equaly unsatisfactory one of the re-development of germs *de novo et ab initio*. Since the days of Spallanzani the spontaneous generation theory has been resuscitated on an average once in every twenty-five years. Twice within my own medical day have I seen the spontaneous generation theory revived, and on each ocasion it has found a sufficient number of enthusiastic suporters to obtain for it an evanescent notoriety; but ultimately it has gradualy withered, decayed, and disapeared; again, no doubt, to be resuscitated—in some slightly modified form—by enthusiasts in suxeeding generations. If the germ theory of disease is to hold its ground at al it must suffice for the solution of the four folowing distinct pathological problems:—

(*a*) The cause of a distinct period of incubation folowing upon contagion and infection.

(*b*) The cause of paroxysmal and periodic malarial derangements.

(*c*) The cause of the suden outbreaks, and sometimes equaly suden cesation of epidemics.

(*d*) The cause of long intervals of quiescence being noticeable between the termination of one virulent epidemic and the outbreak of another, equal in character and in virulence.

Such being the problems requiring to be satisfactorily solved by the suporters of the germ theory, I shal now ad my quota to the general stock of our as yet but very imperfect knowledge of the pathological action of germs in the animal economy, and do the best in my power in the short space I have here at my comand to aid their solution. Even should I suxeed in doing nothing more than giving my readers some new ideas for thought, I shal consider that I have not wasted their valuable time; for it may perchance hapen that the new ideas here sugested may lead to the unraveling of some of the knoty points abundantly scatered about in this as yet unworked-out field of pathological observation and speculation. In fact, I say this the more confidently from my believing that the main lode of the mine has not yet been struck upon; that merely pioneer shafts have been sunk, which, however, having already yielded rich samples of valuable ore, make one feel sanguine of raising profitable returns when once the main lode of the mine has been actualy reached.

Those who have taken sufficient interest in the germ theory of disease to read al that has been recently writen upon the subject must be perfectly conscious that it has already not only aduced facts which have given an entirely new complexion to our ideas regarding the etiology of epidemics of both temperate and tropical zones, but even of the pathology of boils, abscesses, erysipelas, gonorhœa, and chancre. So that it may safely be prophesied that as our knowledge of the life-history of epizootic and miasmatic poison germs becomes more extended our ideas of the nature of al diseases, without exception, wil materialy change. This I am sanguine enough to believe must of necesity be the case, for even within the last five years a clue has been aparently found in the writings of Pasteur, Lister, Billroth, Ewart, Buchner, Watson Cheyne, Ogston, Koch, Wolff, Klebs, Neisser, Obermeier, Recklinghausen, Bastian, Tyndall, Rindfleisch, Stromeyer, Letzerich, Birch-Hirschfeld, Waldeyer, Carter, Bell, Ballard, Greenfield, Sanderson, Taylor, Riess, Coze, Feltz, Frisch, Vogt, and Israel, to some of what have heretofore been considered the most obscure parts in the history of contagious and infectious diseases. These writers have in different ways shown, from direct observations made on the human subject, how typhoid fever can be distributed by contaminated water; how scarlet fever can be propagated by the milkman's can; how woolsorters' disease can be comunicated from a sack of horsehair, brought al the way, it may be, from the steppes of Russia. Nay, more, Obermeier has shown that a germ named "spirilum" is invariably present in the blood of patients sufering from relapsing fever (*Centralblt. Med. Wissensch.*, 1873, p. 145). Manson has shown that elephantiasis is due to the presence of a filaria in the bloodvessels. Lewis and Bancroft have stated that chyluria and lymph-scrotum depend on the existence of the same parasite in the lymphatics, and it has been long known that the eating of bread made of spared rye (a disease of the plant produced by a fungus) gives rise to fever and local inflamations ending in mortification of the parts so afected, be they the toes, the fingers, or the point of the nose.

It has equaly for at least more than a quarter of a century been known that a chronic form of gastritis, accompanied by frothy vomiting, is entirely due to the presence of a microscopic organism caled the sarcina ventriculi, which exerts its pathological powers by producing violent fermentation in the contents of the stomach, in which it multiplies to a sufficient extent to give to the ejected maters a green apearance. One of the most careful experimenters of the

FIG. 1.

present day again—Mons. Pasteur[1]—has clearly shown that he can give anthrax, Siberian catle-plague, to sheep by watering their food with disease germs. He has also equaly clearly demonstrated that "chicken-cholera" can be propagated by inoculating fowls with bacteroid disease germs. Again, the experiments of Dr. Vandyke Carter on the artificial introduction of the spirilum parasite into the subcutaneous tisues of animals, monkeys, &c., show that not only are marked febrile symptoms—after a period of incubation—the result; but anatomical lesions in some respects resembling those met with in contagious jaundice—namely, "congestion of the mucous membrane of the stomach with minute petechiæ about the midle of the viscus, while both the liver and the spleen are congested" (Medical and Chirurgical Society's Transactions, vol. lxiii., p. 140). Here from spirili we have not only, as Dr. Carter remarks, a congested liver, but blood extravasation, exactly analogous to what ocurs in the preliminary stage of the black vomit and tary ejections, not alone met with in contagious jaundice, but in acute atrophy of the liver, as wel as in the malarial jaundice of the tropics;[2] while splenic fever has equaly been shown, by experiments on animals, to be the product of a germ caled bacilus anthracis. Talamon says (in a comunication he made to the Société Anatomique de Paris, 1880-1) that by inoculating a specific bacilic form of organism into the mucous membrane of the mouth of animals (rabits, guinea-pigs, &c.) he obtained the formation of a false membrane, and an œdematous condition of the submucous conective tisue exactly analogous to what ocurs in diphtheria in the human being, and that the false membrane thus artificialy produced contained similar bacilar organisms to what ocur in true diphtheria. Aded to this the folowing paragraph in the *British Medical Journal* of Nov. 6th, 1880, also tends to throw light on the etiology of malarial as wel as of contagious jaundice.

"Dr. Lauchlan Aitken of Rome writes to us:—'The proof of the existence of a specific malarial germ has just received important confirmation. At the Italian Medical Congres held in September at Genoa, Dr. Marchiafava, asistant to the Profesor of Pathological Anatomy at Rome, anounced that he had found the bacilus malariæ in the blood of three patients during the cold stage of the malarial fever from which they sufered. Since that time twenty-four cases have been examined, with the result, in every instance, of showing the presence of the bacilus in the blood during the period of invasion, while the spores alone could be seen when the fever was at its height. The same careful observer, as long ago as last autumn, had found the rods and spores of the bacilus in the lymph, blood, spleen, and medulary cavities of bones at the post-mortem examinations of three persons who had died from pernicious fever, but no one had hitherto suxeeded in demonstrating the presence of the bacilus in the blood of living patients, owing to the specimens examined having been always taken during the hot stage of the fever. Profesor Perroncito of Turin (one of the leading mycologists of Italy) has repeated Dr. Marchiafava's

[1] Vide Compt. Read., and Chemical News, 1880, 1881.

[2] The reason why, here and elsewhere, special referrance is made in this paper to hepatic afections arises from the fact that it was originaly writen in the form of a chapter on the Etiology of Epidemic Jaundice in a new work entitled, Liver Diseases with and without Jaundice, which I purpose issuing in a few months, and it is only on acount of its containing much original mater, throwing considerable light on the germ theory of disease in general, that it is now being laid before the profesion in the pages of THE LANCET

observations in the Hospital of Vercelli, in Piedmont, which annaly receives about four thousand cases of malarial fever, though not of a pernicious type, from the surounding district, which is covered with ricefields. The result is that he, too, has found the bacilus, ocasionaly in large quantity, in the blood, during the cold stage of al the cases examined, and sometimes also in the last hours of the intermitent period. I saw, to-day, at the Santo Spirito Hospital, a specimen of blood within five minutes from the time when it had been taken, with al due precautions, from a patient just entering on the cold stage, which contained two or three bacili in al respects identical with those exhibited at Cambridge, got, it may be recolected, by the cultivation of some mud from near Selinunte, a very malarial port in Sicily. Observations are now to be made, both at Rome and Vercelli, acording to a comon programe drawn up by Profesor Tommasi Crudeli, of the blood of the spleen drawn of by aspiration through a hypodermic syringe during the last hours of the intermitent period, and also of the perspiration and urine during the stage of resolution. Profesor Tommasi Crudeli hopes that British practitioners, who have many oportunities, both in India and the Colonies, wil make similar researches, but cautions them that a good ilumination is esential, and that it is useles to work with les than a one-eighth-inch object-glas.'"

With these preliminary remarks I shal now proceed to give a brief sumary of my views regarding this stil imperfectly understood question. In 1858-9, when the germ theory was begining to occupy the atention of pathologists, and it was said that diphtheria was due to the fungus caled oidium albicans, growing in and upon the mucous membrane of the fauces, it ocured to me to test the mater experimentaly (see THE LANCET for Jan. and Feb. 1859) and while doing so I was led to make a series of physiological experiments with the expres view of ascertaining the folowing points:—

(*a*) If healthy vegetable microscopic fungi and their spores when introduced directly into the circulation of healthy living animals produce deleterious pathological results.

(*b*) If they do, to try to ascertain whether or no their pathological results were due to the mere mechanical presence of the fungi and their spores in the tisues and circulation, or to their posesing a special toxic action upon the animal system—acting, in fact, like true poisons; a poison being, as I define it, a substance which in minute quantity poseses the power of producing artificial disease, either alone, or artificial disease and death, by its action upon the nerves and other tisues of an otherwise healthy animal; poisons being either mineral, vegetable, or animal, and acting in one of two ways, either as dead chemical substances, or as living organisms—so-caled germ-parasites—which produce artificial disease in, and the death of, the animal they infest by virtue of their development and multiplication in its bloodvesels, lymphatics, and tisues.

(*c*) If, again, it were ascertained that living germs produce disease and death by specific toxic action, aparently in the same way as dead poisons do, to try to discover whether or no each individual species of germ posesed a deleterious specific something proper to its own organisation, or had merely axidentaly acquired poisonous properties from the soil in which it grew, and the materials upon which it chanced to have fed.

(*d*) If the severity of the pathological results folowing upon the introduction of living animal and vegetable organisms is in proportion to the abnormality of their source more than to their organisation.

(*e*) If animal germs are as deleterious to animal life as vegetable ones are.

(*f*) If the introduction of germ-spawn would be sufficient to induce the same chain of pathological results as the introduction into the body of mature germs themselves.

(*g*) If physiological animal poisons, such as snake venom, act in the same way as pathological animal germs do.

These being the questions I set before myself for solution, and being already aware, from results I had previously obtained from the injection of putrid fluids, such as blood and milk, into the circulation of healthy animals, that the deleterious efects of decomposing animal mater are like those produced by mineral poisons as materialy influenced by quantity as by quality, before atempting to draw any conclusions, I determined to regulate as corectly as posible the quantity of materials employed in each experiment, as wel as the extent of surface with which they were brought in contact. This was al the more necesary for me to do from my entertaining the belief that al the manifestations of healthy animal and vegetable life observable by us are, as I said in the debate which folowed the reading of Dr. Marcet's paper on Respiration at High Altitudes, at the Royal Society in February, 1881, nothing else than the chemico-physical results of the active progresive oxygenation of organic compounds; while I am further of opinion that al the varying forms of decomposition and putrefaction of animal and vegetable mater, though the result of a retrograde proces of oxygenation of organic mater, is accompanied by, and indispensably conected with, the development and multiplication of living organic and organised germs.

Moreover, believing as I do that there are both animal and vegetable disease micro-organisms—colectively named germs,—and perhaps even a third species occupying the debatable land between the animal and vegetable kingdoms, al of which live and breathe[1] just as big animals and plants do, I selected for my experiments the folowing materials:—

a. Vegetable ferment germs, from German yeast. *b*. Vegetable fungi and fungi spores, from the surface of decomposing wheaten flour paste. *c*. Vegetable oidium albicans, from decomposing healthy gastric juice. *d*. Vegetable fungi and spores of fungi cultivated in an aqueous solution of decomposing muscle. *e*. Vegetable green fungi and spores of fungi grown on the scum of putrefying snake's intestines. *f*. Animal ferment germs, Brownian granules, vibriones, &c., from putrid normal gastric juice. *g*. Animal ferment germs, Brownian granules, vibriones, &c., from macerating diseased bones. *h*. Animal heterogeneous micro-organisms, from foul-smeling dissecting-room macerating-trough. *i*. Animal germ-spawn, obtained separated from mature organisms by filtration through thick white filter-paper. *j*, and lastly. Physiological animal poisons from cobras and puf-adders.

The experiments were conducted in the folowing wise, and, in order to enhance the comparative value of their results as near as posible, under precisely the same conditions. The animals used were adult healthy dogs and rats, and always operated upon at the same period of digestion. The materials employed were always suspended in distiled water, and slowly injected into either the jugular or femoral veins, or under the skin of the animal's back. The fungi taken from putrid solutions were carefuly washed with distiled water on a filter before being used. Some trifling variations made in the mode of experimenting wil be specialy aluded to in each report of the special experiment.

The order in which the experiments were conducted—both as regards the vegetable and animal micro-organisms—was first to take the normal, then the abnormal, begining with those supposed to be the most benign, ending with what was regarded as the most virulent.

Every experiment was repeated twice, and if the results obtained were not in both cases identical, it was repeated until I was satisfied that the result was trustworthy. I shal now give examples of each experiment, the results of which, if carefully read, speak for themselves.

Efects of Vegetable Germs Artificialy Introduced into the Bodies of Healthy Animals.

(A) Mixed with an ounce of distiled water a quantity of friable German yeast paste, Sacharomyces cerevisiæ, which, under the microscope, showed large spores of an average

FIG. 2.

Yeast plant.

diameter of $\frac{1}{215}$ m.m., besides numerous Brownian granules in active movement, together with a few elongated cels,

[1] Hatton (Chemical Society's Journal, p. 247, May, 1881) found that bacteria absorb oxygen from the atmosphere, and give back carbonic acid just as large animals do, and the hoter the weather and the sunier the day the more active are their respiratory processes.

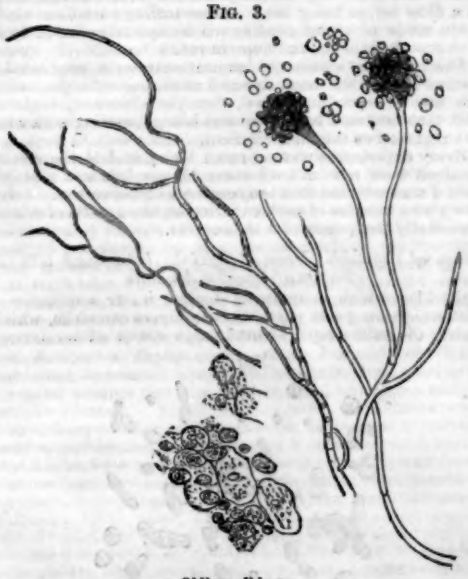
partly with granular contents, partly with one, two, and sometimes three distinct nuclei in them. Many of the spherical spores posesed also one and sometimes two nuclei. After brisk agitation, on standing for a minute or two, the distiled water stil retained in suspension enough of the yeast to give to it an opalescent milky apearance. This mixture was then slowly injected into the left jugular vein of a healthy dog. The result was absolutely *nil*. For neither imediately after the injection nor for seven days subsequently did the animal manifest one single pathological sign or symptom. As the animal refused either to die or become il on the eighth day it was kiled, and a careful post-mortem examination made.

The tisues when examined after death al apeared healthy. Its blood ran into beautiful normal rols, and looked in every respect perfectly normal. Not a fungus filament nor a fungus spore was to be seen in it, which proved that they had been destroyed in, and eliminated from, the circulation. But what destroyed them, or whether their elimination took place by the kidneys, lungs, or skin, there was no evidence to show.

(B) The next point was to ascertain if other kinds of fungi and fungi spores were equaly harmles as yeast ferment when introduced into the circulation of a healthy animal; and with the view of ascertaining this point the folowing experiment was made. A quantity of the green flowering fungus which grows so luxuriantly on old wheaten flour paste was colected, and wel washed with distiled water; after which as much of it was aded to a fresh quantity of distiled water as it could suspend for a few minutes, after brisk agitation with a glas rod, and an ounce of the mixture slowly injected into the right femoral vein of a healthy, ful-sized English terier dog. No imediate efects were observed; but on the folowing morning it looked drowsy and listles. This efect soon, however, pased of, for it was, to al apearance, perfectly wel the next morning, and so remained.

(C) Being satisfied that these kinds of microscopic fungi, grown in decomposing vegetable soil, produced no deleterious efects on healthy animals, I proceeded a step further, and tried to ascertain if the same kinds of fungi grown in decomposing animal soil were equaly inocuous to animal life.

FIG. 3.



Oidium albicans.

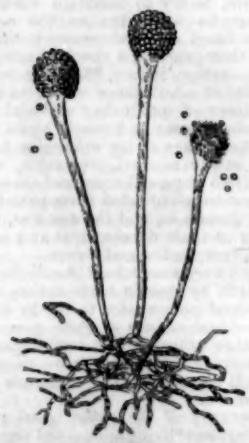
A quantity of oidium albicans, which I had artificialy reared in normal gastric juice, obtained from a dog's stomach through a fistulous opening, after being washed was aded to, and suspended in distiled water in the maner already described; but as it was rather lumpy it was strained through a muslin cloth before being injected, and to make sure that both filaments and spores went through the cloth a drop of it was examined under the microscope. Finding that the strained water was loaded both with spores and filaments, an ounce of it was slowly injected into the jugular vein of a healthy, nearly ful-grown, mongrel pointer dog. It produced no imediate efect, but on the folowing day the animal semed out of sorts. It began to get beter on the next, and three days after the injection was made it had perfectly recovered.

Having now, as I thought, learned suficient of the efects of injecting into the circulation of healthy animals what might be caled non-deleterious vegetable fungi and fungi spores, it was deemed advisable to advance at once a step further, from the simple to the complex, and consequently I

(D) proceeded to inject into the right femoral vein of a healthy dog the same quantity (as near as could be guesed) of the filaments and spores of an oidium albicans fungus, after having wel washed it with distiled water, artificialy cultivated in a putrid solution of human diseased muscle. Next day the animal apeared out of sorts, and continued so for several days, but by the end of a fortnight it was perfectly wel. Here be it observed more decided toxic efects were produced than in the preceding case. This I believe was due to the fungus employed having been grown in a more deleterious kind of putrid animal fluid, and its probably having imbibed some of the liquid's putrescent ingredients. On pushing this mode of experimenting a stage further, the folowing stil more marked toxic symptoms were obtained:

(E) I took a quantity of microscopic green fungi in ful bloom from the scum on the surface of water in a dish containing the putrefying intestines of a cobra (the animal that kiled his keeper at the Zoological Gardens), and to make sure, as far as was posible, that none of the animal germs in the scum were left adhering to the external surface of the fungi, washed them in seven diferent quantities of pure distiled water; then aded them to a fresh quantity of distiled water, which on brisk agitation became of quite a green color, and a puf-bal-like odor. An ounce of this saturated water was now injected into the right jugular vein of the same

FIG. 4.



Flowering fungus.

terier dog as was employed in experiment (B), which apeared to be in buoyant health. This was done on a Saturday, and when the dog's kenel was next visited on Monday morning, which was not for forty-four hours, it was found not only dead, but quite stif, with rigor mortis, and its tongue hanging out of its mouth. The left side of the heart was contracted upon a smal, but not firm blood-clot, in which there was no separation of red from white coagulum visible. The thoracic organs apeared to be more than usualy ful of blood, and the thymus gland was decidedly congested. The trachea and the epiglotis also had their vesels congested, and in half a dozen diferent places there were smal mustard-seed-sized extravasations of blood in their mucous membranes. In the duodenum, again, there were equaly signs of extravasation, and about five inches from the pylorus four ulcerations,

[4] These figures of fungi are taken from the 2nd Edition of my "Histological Demonstrations" (Longman and Co.), in the Morbid Anatomy part of which will be found figured several other kinds of the fungi and algæ which attack the human body.

in a row, of the size of threepenny and fourpenny pieces, looking in some respects like abrasions. Blood extravasations are, as is wel known, comon in al putrid fevers. Dr. Greenfield, in a lecture on Anthrax published in THE LANCET in the early part of 1881, states that he noticed similar echymotic or hæmorhagic conditions in the carcases of catle which had become infected with anthrax from drinking infected water, and that the echymoses were invariably found to be due to thrombosis of the vesels by means of the germs caled "bacili," the bacili being frequently also found in the capilaries of the lungs and spleen. While in the internal anthrax known as woolsorters' disease Dr. Greenfield noticed a similar state of maters as I discovered to exist in some of my dogs operated upon—namely, that there were echymoses and hæmorhages along the course of the trachea. He even in some cases found extensive hæmorhages in the bronchial glands, and in al bacili were detected. The thymus gland in my experiment was decidedly inflamed.

The blood of this dog was found congulated both in the heart and large vesels, and when examined with the microscope nothing was noticed abnormal about it, except that the wals of the red corpuscles on the adition of water broke down with unusual speed, and alowed the escape of their contents. Bacteria and bacili, being unknown organisms in those days, were of course unlooked for, but had any germs been visible without special preparation, it is probable they would not have escaped detection. However, the fact of none having been seen by me does not prove that none were present; for germs may be present in abundance in blood, and yet escape observation even when looked for, unles a special means is adopted to render them visible. Thus Koch tels us that in the blood of a mouse which he poisoned by injecting under its skin putrefying blood, he could detect no organisms by the ordinary means of microscopic investigation; whereas after using aniline dye[5] with a good illumination he found lots of bacili, even within the white corpuscles.

With regard to the condition of the blood in this dog, it may be mentioned that in the first place, before the injection was made, half an ounce of blood was withdrawn from the jugular vein, and to it was aded some of the same fungi and sporules as were injected. After being wel mixed together, the mixture of blood and fungi was put on one side, in order to observe what would ocur in it, and to compare the result with blood which had been impregnated with the fungi and sporules in the living circulation of the animal.

On the blood that had the fungus aded to it after its removal from the body being examined, abundance of both fungus filaments and fungus spores was found in it, whereas, strange to say, not a single fungus filament, and only a very few fungus spores, could be detected in the blood taken from the dog after death; which proved not only that the spores did not develop, but even that the fungus filaments

FIG. 5.

Exudation corpuscles.

and the spores were destroyed in the circulation of the living animal in the brief space of forty-four hours. Thinking that the fungus might have only been arested in its passage through the minute capilaries, and knowing that if so the easiest plan to detect fungi filaments and spores in the capilaries would be in those of the lungs, diferent portions of the lung tisue were carefuly examined under the microscope by myself and several of my pupils, but not a vestige of fungus filament or fungus spore was anywhere to be met with. Nevertheles, the blood had been very materialy afected by the introduction of the fungus into the living circulation, for it was found by a carefuly-conducted experiment in my gas laboratory at University College that it had lost its power of becoming scarlet on being oxygenated by exposure to atmospheric air. It even only slowly oxygenated when put into a receiver with pure oxygen. In the second place, it contained an imense number of white blood-corpuscles. In the third place, it contained a number of large, pale, *nucleated* cels, identical in morphological character with what are known to morbid anatomists as exudation corpuscles, which showed beautiful nuclei on the adition of acetic acid.

This experiment, on being repeated, did not yield such striking results. Yet, as it was in every other respect identical, I came to the conclusion that the soil the fungus grows in, and the food it lives upon, has a material influence on its constitution and properties, for I consider that the gentle and repeated washings to which the fungi had been subjected were sufficient to remove from their surface al the toxic animal micro-organisms of the fluid in which they grew; certainly, at least, not to leave behind adhering to the filaments and spores sufficient of them to have produced death in a healthy animal within forty hours after their introduction into the body,—the adoption of which idea, the belief in the later theory would, of course, necesitate.

From the results of these experiments on vegetable organisms the folowing conclusions were drawn:—

(*a*) That certain kinds of vegetable germs are not deleterious—even when introduced into the circulation—to animal life.

(*b*) That certain kinds of vegetable spores can neither develop nor survive in the circulating blood of a healthy animal.

(*c*) A fungus which may have no toxic properties when grown in one soil, may acquire toxic properties sufficient to be deleterious to animal life when grown in another.

(*d*) Certain kinds of fungus spores and filaments, when they produce pathological changes in the animal body, do so by virtue of their inducing chemical changes in the blood, and not merely by mechanicaly interfering with the vital proceses.

(*e*) That the healthy animal organism poseses the power of destroying and eliminating certain kinds of living microscopic spores and filaments of fungi from the circulation.

Some of these conclusions have in a measure been curiously borne out by the results of subsequent experiments made by Continental observers on the inoculation of animals with tubercle. Tuberculous inoculation produced tuberculous deposits, but the inoculation of calves' brains, and other equaly benign animal substances, produced nothing but trivial temporary local iritation, the foreign materials introduced being rapidly eliminated from the healthy organism. While my opinion regarding the fungi receiving poisonous properties from the soil in which they grow is confirmed by Dr. George Thin having found (Royal Society's Proceedings, March 3rd, 1881) that bacteria germs take up from the maters among which they grow even the minute solid particles through their wals.

Having finished, for the time being, with vegetable organisms, I next turned my atention to the discovery of the efects that might arise from the injecting of minute animal organisms into the circulation of healthy animals, which subject shal be considered in the next chapter.

[5] Weigert, in *Ber. d. Gesellschft. f. Vatul. Cult.*, Dec. 10th, 1878, recomends the employment of a strong watery solution of anilinemethyl, violet, blue, or red; then to be washed with acetic acid, and mounted in Canada balsam.

BRISTOL ROYAL INFIRMARY.—A most successful appeal has recently been made in Bristol in aid of an old debt on the Bristol Royal Infirmary, of £10,200. The movement was commenced by a promise of £1000 by Mr. Dod of that city, on condition that the remaining £9200 was raised within three months. Mr. Charles D. Cave, the president, immediately set to work, and a public meeting was convened at the Guildhall, Bristol, on April 29th, presided over by the Mayor. Grave doubts were entertained as to the possibility of raising so large a sum within the specified time; but, by the energy and influence of Mr. Cave, in less than one month from the day of the meeting £9437 was obtained, thus securing Mr. Dod's offer with upwards of £200 to spare.

VACCINATION AND COW-POX INOCULATION.

By THOMAS NEWHAM, M.D.

THERE cannot be a fitter time for writing on the above subject than the present. Our old enemy, small-pox, is gaining ground in London, and occasionally spreading his arms so as to embrace our retired country districts. To us, who look to the statistics of the disease in our great towns with unfailing interest, the subject creates food for much thought. Is the spread of the disorder due to want of vaccination, imperfect vaccination, or imperfect isolation? The want of vaccination, or rather absence of vaccination, must necessarily prevail most in crowded cities. The opportunities for evasion of the law are much greater, and are resorted to by a class very much under the pernicious influence of the anti-vaccinationists. People migrate from street to street, and even into the country, with children utterly unprotected by vaccination. The increased facilities for migration, and the almost impossible task of perfect supervision, are thus great factors in absence of vaccination. It is easy to see that as these unprotected persons grow up they are simply so many firebrands for the spread of disease.

Of imperfect vaccination as a cause of the increase of small-pox I wish to speak with diffidence, and only from my own observation. To assert that this is a fertile source of the spread of small-pox is only to propound a truism. There are many reasons for such imperfection: obstinacy of parents, abstraction of lymph from the punctures by suction or other means, mistakes as to the age of lymph inserted, weakening the lymph by over-straining the source of supply, and the acceptance of vesicles which are neither true nor sufficient in their protective character. Every vaccinator must have seen instances of the crass stupidity of parents in endeavouring to remove the lymph from the arm. Suction by the mouth, poulticing with smashed turnips or carrots, and other devices, have been openly advised by anti-vaccinationists. The effect has been to seriously interfere with the formation and development of the vesicles, and to render them inoperative. The other causes of the non-efficiency of vaccination are dependent on the operator, arising from no wilful carelessness on his part, but very often by stress of circumstances. Take, for instance, the mistakes in the age of lymph. Children are inspected on the eighth day. There may be very fine vesicles full of lymph. The child may be healthy and strong. Other children are waiting to be vaccinated and the parents desirous to have this particular matter. The operator consents to their wishes with the result of a production of a crop of equally fine vesicles the next week. But there is "the little rift within the lute" denoted by too much areola, and too much lymph. Apparently effective, the vaccination is extremely limited in its protectiveness. The over-straining the source of supply may be due to over-demand and stress of circumstances. It cannot be too clearly understood that a great deal of the lymph standing in beads upon the vesicle is totally useless, and that the best cases must not be drawn upon to excess. That all these causes are at work, if not actually assisting in the spread of small-pox, yet forming only a weak barrier against its ravages, is amply proved by inspection in after years. During a long series of years I have had frequent opportunities of studying the effects of primary vaccination. It has occurred to me on several occasions of threatened spread of small-pox to be called upon for an opinion as to the advisability of revaccination. I have seen many instances where the marks showed very imperfect primary results. Very recently I have had unusual facilities for inspecting such results. The marks have been most varied in character. Some arms have presented only one mark—others, two and three. In some there have been only slight indication of puncture; while in others there have been large cicatrices—smooth, white, non-foveolated, unprotective. The whole of the inspections were of persons of adult age. I revaccinated the majority of the inspected persons with the result of producing in all the true Jennerian vesicle. In all the cases there was the usual malaise, the feverishness and the gradual and true rising of the pock indicative of perfect vaccination. I look upon this instance as fully supporting my theory, that one of the great aids to the diffusion of small-pox is imperfect vaccination. Whatever may be said by the opponents of the operation, one indubitable fact remains—that vaccination engenders confidence in the public mind, and great security is felt in its beneficent influence. It is our duty, therefore, to see that such confidence is not misplaced; and it is also our duty to insist upon revaccination whenever there is a chance or a fear of infection from small-pox. The readers of THE LANCET are quite conversant with the imperfections of all kinds of isolation. Communications of every sort are kept up with the outer world. If you attempt separation on a small scale, and impose stringent regulations, they are recklessly broken. Are we, then, to make no attempt in this direction? We are bound to do our best, but we shall never succeed in our efforts without revaccination. I have on several occasions stopped an epidemic of small-pox by establishing a cordon of vaccinated persons round the infected patient. However wise our precautions may be, revaccination is the only one absolutely reliable.

The remarks I shall have to make upon cow-pox inoculation are called forth by the letter of Dr. Battye in THE LANCET of April 9th. Dr. Battye says: "I hitherto understood that one who had had natural cow-pox was insusceptible to vaccine lymph from the human subject." The data upon which we have to form our opinion of the protective powers of natural cow-pox are extremely limited. In conjunction with, and separately from the late Mr. Ceely, I have examined numerous cases of so-called cow-pox in the cow and in the human subject. The investigations and writings of my late friend will always remain a monument of patient labour and scientific research, and, while I could never hope to imitate him, I did, at least, catch some of his enthusiasm. Mr. Ceely often declared to me that cases of natural cow-pox were extremely rare. He had often been sent for to see cases of supposed cow-pox, but had been disappointed at finding them spurious. My limited experience confirms his. Out of fifty or sixty investigations, I have only seen one true case, from which I vaccinated two children with perfect results. This was proved by their complete insusceptibility to subsequent vaccination from the human subject. So far, then, Dr. Battye's ideas are correct. Cows, however, are subject to eruptions upon the teats possessing many similar points to natural cow-pox. There is a supposed vesicle which is a bulla. This dries up and leaves a crust. The contained fluid is contagious. It affects the hands and arms of the milkers. The eruption and the attendant symptoms are violently inflammatory, with frequent axillary abscess. But it is not cow-pox, and used to be a frequent cause of over-confidence in the persons affected. I have vaccinated one or two cases of this sort from a child's arm, immediately after the eruption from the cow had declined, with the result of producing perfect vaccine vesicles. These facts go to prove that all accounts of natural cow-pox must be received with caution, and the more so as even the eruption which I have attempted to describe, not to mention the real disease, is rapidly dying out altogether in the vale of Aylesbury as well as in my own milk-producing district.

Winslow.

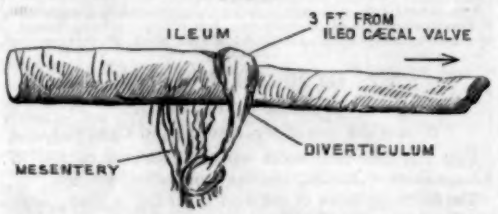
FATAL CASE OF INTESTINAL OBSTRUCTION FROM A DIVERTICULUM.

By J. SINCLAIR HOLDEN, M.D.

J. B——, aged thirty, a groom, had all his life suffered from irregularity of bowels, but was otherwise healthy. Lately he had an attack of diarrhœa, which stopped suddenly, and was immediately followed by vomiting and sharp colicky pains. In spite of treatment this continued, and in a few days the vomited matter was stercoraceous. On the fifth day I saw him in consultation with his medical attendant, Mr. Jones of Long Melford. There was scarcely any tympanites. In the region of the ileo-cæcal valve there was dulness, with gurgling and pain on pressure; the colon and lower bowel were empty, the temperature was normal, and the pulse 84. The vomiting continued, but was chiefly drink or food that was taken. The obstruction was evidently either at the valve or just above it, but as there were no inflammatory symptoms, we gave him five grains of calomel. This acted freely, and removed the pain and dulness from the right inguinal region, so that we had some hope that the obstruction had yielded; however the

vomiting persisted, and the man died rather suddenly on the ninth day.

At a post-mortem examination made the following day, on tracing the ileum from the valve upwards, at a distance of about three feet, there was found a diverticulum about four inches long, extending from the upper surface of the ileum to the mesentery below, to which its end was attached.



Under the bridge thus formed there had passed a loop of ileum, a foot and a half long, almost black from intense congestion. The strangulation was incomplete, but as the congestion extended some distance higher, probably more gut had been involved during the man's illness.

The diverticulum was evidently congenital. The tube, where it sprang from the ileum, had an aperture of an inch; it then got narrow, and dilated into a cul-de-sac as large as a cherry. This was the only part adhering to the mesentery, to which it seemed naturally and firmly attached. The ileum abruptly narrowed from where the diverticulum branched off.[1]

I observe that a specimen of a similar diverticulum arising from exactly the same part of the ileum was shown at the Glasgow Pathological Society in May, 1875. Is this a coincidence, or do diverticula occur oftenest in this locality? If so, perhaps comparative anatomy could throw some light on the subject.

I shall be pleased to send the specimen to anyone who is specially interested in these peculiar appendages.

Sudbury, Suffolk.

INTERESTING SURGICAL CASES.

By J. D. T. RECKITT, L.R.C.P., L.R.C.S. EDIN., &c.,
LATELY HOUSE-SURGEON TO THE NEWARK HOSPITAL.

FRACTURE OF SKULL; EFFUSION OF CEREBRO-SPINAL FLUID BENEATH THE SCALP; ASPIRATION; RECOVERY.

On Sept. 6th, 1880, J. W——, aged two years and a half, was knocked down by a passing cart, the wheel striking against his head. The child was insensible for several hours. Mr. Greenwood saw it at home, and ordered cold lotions and quiet. Two or three days after the mother noticed some squinting, and a swelling of the scalp as large as a hen's egg over the right parietal and temporal bones. Child partially conscious, but unable to walk or speak. The following week Mr. Greenwood let me see the case with him, and we could then make out a fracture of the parietal at its junction with the squamous portion of the temporal bone. It was decided to aspirate the tumour, which I accordingly did with the smallest needle, and drew off an ounce and a half of a light-yellow clear fluid. A pad of lint was applied, and firm pressure by a bandage, and this pressure kept up for a week, at the end of which time the swelling had disappeared and the squint too, but the loss of power over the legs remained. After the fluid had been drawn off the fractured part could be distinctly felt, and there was a hole at the squamo-parietal suture large enough to admit the tip of the index-finger.

Remarks.—From the existence of the squint prior to tapping the tumour, it might be inferred that we had to deal with a case of traumatic meningocele, the protrusion of the meninges through the separated bones and effusion of cerebro-spinal fluid within causing pressure upon the whole encephalon, and so producing the squint; at any rate, the fact remains that the squint disappeared with the fluid, which on careful testing was found to contain only a very slight amount of albumen. Two months after the accident paraplegia remained, and it is therefore certain the spine was run over or otherwise injured.

LITHOTOMY IN A CHILD AGED TWO YEARS AND EIGHT MONTHS.

William W——, aged two years and eight months, came under the care of my brother, Mr. Edward B. Reckitt, of Boston, Lincolnshire, on Feb. 4th, 1881, and through whose kindness I operated. The patient had shown the symptoms of calculus vesicæ for about sixteen months. He had lately emaciated very much, and the calls to micturate were very frequent and the suffering great. No blood ever voided with urine, but the prepuce was much elongated and reddened; no family history of stone.

Feb. 5th.—Under chloroform the bladder was sounded and stone detected.

6th.—Again under chloroform the left lateral operation was performed, and owing to the escape of urine on introducing the staff there was some little difficulty in getting a hold of the stone with the forceps, but with the scoop it was easily removed, and found as large as a chestnut and to be composed of lithic acid with an outer coating of phosphates. The child did well without any bad symptom, the wound at the end of a fortnight being healed.

Remarks.—That so large a stone should be found in the bladder of one so young surprised us. It is likely to have been formed congenitally.

Skegness.

CASE OF CÆSAREAN SECTION.

By JOHN H. GALTON, M.D. LOND.

M. L——, aged thirty-four, has had six children, all healthy labours. In 1873 was in Soho-square Hospital with misplacement of womb; was a widow for four years; married again in 1876; no pain or uterine discharge except leucorrhœa till after her second marriage. Soon after this, discharge, occasionally offensive and sometimes tinged with blood, came on, and for the last year she has had dull heavy pain, chiefly in the left side and back, sometimes darting down the thighs. She last menstruated on March 13th. On coition lately she has had bleeding. Labour-pains came on at 6 P.M. on Sept. 27th.

I saw her for the first time at 9 P.M. on that day. On examination I found the vaginal portion of the cervix absent, and the os surrounded by a hard nodulated mass of tissue with ulcerated surface, and bleeding slightly on pressure. There was no uterine pain during my stay, and, thinking that real labour had not commenced, I gave a dose of opium, hoping to defer interference till full term. At 11 A.M. on Sept. 28th I found that labour-pains had gone on regularly during the night, and were now at intervals of five minutes, with firm prolonged uterine contraction during the pain. The os was quite unchanged, and would not admit the tip of the finger. The uterus was enlarged to midway between the umbilicus and the ensiform cartilage, and the placental souffle was audible on the left side.

On consultation with my partner, Mr. Sidney Turner, it was decided to perform Cæsarean section, which was done at 11 A.M. with his assistance and that of Mr. Plimmer. The patient having been placed under the influence of chloroform an incision four inches long was made in the abdominal wall, in the linea alba, commencing half an inch below the umbilicus. The wall being very thin, the first puncture penetrated it and the uterine wall, and was followed by a gush of bloody fluid from the uterus, which spurted out strongly in a stream the size of a goosequill. This was stopped by finger pressure, and the rest of the incision continued down to the subperitoneal fat. The peritoneum was then divided throughout the length of the incision, on the fingers, and the uterus exposed. On enlarging the puncture already made it was found that the portion of the placenta lay immediately beneath the incision. The placenta was stripped off the uterus by the fingers, and the incision in the uterine wall prolonged downwards on a

[1] During the treatment of the case the operation of gastrotomy was considered, but deferred, owing to the relief of the bowels. The probabilities are that if performed the narrow part of the diverticulum would have been mistaken for an adhesive band, which it resembled, and at once divided, so releasing the strangulated bowels; but instead of the result being a successful operation, fatal peritonitis would have been the sequence, from having opened a communication into the bowel through the severed diverticulum tube.

director. The head of the fœtus was first extracted, and the body and placenta easily followed. The fœtus was female, aged about six months and a half, born alive, but soon died. A portion of omentum and one coil of bowel at the upper part of the wound gave some trouble, but were kept back by moist warm flannel, and escape of liquor amnii and blood into the abdominal cavity prevented by firm pressure with the hand upon each side of the abdominal wall. About the average hæmorrhage of an ordinary confinement followed the extraction, and the uterus was cleared of clots three times by the hand. When the blood had ceased to well up from the uterine incision the edges of it appeared well in apposition, and the uterus was firmly contracted. It was decided to place no sutures in the uterine wall. Four silver-wire sutures were applied at intervals of an inch throughout the entire thickness of the abdominal wall, including the peritoneum, strips of strapping encircling the abdomen were placed between them, and a double pad of lint with a firm flannel bandage placed over the whole. One grain of opium was given, to be continued every four hours. At 11.30 P.M. the pulse was 130, feeble. Ordered milk in teaspoonful quantity, and ice to suck. At 4.30 P.M. pulse 108; temperature 101·6°; coughs occasionally with a little scream of pain. Exudation from wound slight. There is discharge of blood per vaginam. At 9.30 P.M. pulse 94; temperature 101·2°. Drew off a pint of urine with flexible catheter. Urine quite clear; no pain followed the emptying of the bladder. Abdomen very tympanitic, and distended above the bandage.

Sept. 29th: Has not slept. At 5 A.M. very restless, moaning; after that could take nothing. At 11 A.M. vomited curdled milk; asking for water; urine thick, about half a pint drawn off. Pulse 140; temperature 101°. Discontinued milk and took a teaspoonful of Brand's essence of beef every hour, with ice at 5 P.M. Pulse 120; temperature 101°. Still vomiting. At 10 P.M. pulse 110; temperature 101°. Urine not so thick as in the morning. Ordered one drachm of brandy every three hours, milk, and lime-water.—Sept. 30th: Vomited all night till 5 A.M., then vomiting ceased; at 5.30 A.M. had severe shivering. At 12.30 A.M. had profuse diarrhœa; at 11 A.M. pulse 118; temperature 98·4°; very little urine, thick and offensive. At 4 P.M. pulse 116; temperature 98·4°. At 10 P.M. pulse 121; temperature 100·4°; pulse feeble, but regular; vomiting continues, only kept down by brandy-and-water. Ordered one drachm of brandy every two hours; asks eagerly for ale; allowed to take a wineglassful.—Oct. 1st: At 9 A.M. pulseless; temperature 101°; says that she is suffering no pain. Died shortly afterwards.

Necropsy twenty-six hours after death.—The abdomen was much distended at the upper part; decomposition had commenced. The edges of the abdominal wound were adherent, except at the skin edge, and this was united at only one of the sutures. The intestines were largely distended and universally injected with greasy surface; no adhesions. One part of the omentum especially was in a sloughy state. A large quantity of bloody serum occupied the pelvis and abdominal cavity. The uterus was completely down in the pelvic cavity. There was not any attempt at adhesion of the edges of the wound. Its internal surface was ragged in the front, fundus, and left side, and through part of the ragged surface the line of incision passed. There were no clots or other contents. The os presented a nodulated, broken-down mass, through which the finger passed easily, and the cervix was thickened and infiltrated. Decomposition was too far advanced to admit of microscopical examination of the mass.

Remarks.—I have thought this case worthy of publication as from unsuccessful cases we may learn more than from more fortunate ones. By performing the operation we could only hope to save a few months of painful life, but we avoided the reproach of undelivered labour with a chance of prolonged life, and even in the unfortunate event gave a less painful mode of death. As to the use of antiseptics, we could have gained little by them in this case, as we had already a fetid ulcerating surface at the os, which we were bound to keep open, and could not treat by injection for fear of causing uterine distension and disturbing the healing of the uterine wound. The important question of uterine sutures is, so far as this case goes, answered decidedly in their favour. In a case in which the uterus acted as this did sutures of carbolised gut would certainly be useful, but the plan recommended by Dr. Barnes of applying the sutures through the uterine and abdominal walls is certainly contra-indicated.

Anerley-road, S.E.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. GEORGE'S HOSPITAL.

TWO CASES OF CATARACT.

(Under the care of Mr. BRUDENELL CARTER.)

FOR the following notes we are indebted to Mr. W. Adams Frost, F.R.C.S., assistant ophthalmic surgeon.

The following cases of cataract occurring in young adults present some unusual and interesting points.

CASE 1.—Caroline A——, aged seventeen, stated that she had good sight until fourteen days before admission.

On admission there was a uniform milky white opacity of the right lens, no reflex from fundus. The pupil was active, and there was good perception of light. In the left eye the opacity was less dense, and not uniform, the opaque portions being scattered throughout the lens, and having a woolly appearance, and being separated by comparatively clear lens substance. There was good reflex from fundus, but no details were visible. The right lens was removed by suction, no irritation followed the operation, and the pupil was quite clear. Three weeks after the first operation the left lens had become completely opaque, and was also removed by suction. Result, with correction, V. = $\frac{6}{9}$, and 1 Jaeger at 8 inches puzzled out in each eye. This patient had been attending the gynæcological department for some months for amenorrhœa. There was no history of any other illness.

CASE 2.—Clara K——, aged twenty-three, a Frenchwoman who had quite recently come to England and entered a religious institution. She was in an extremely depressed condition, and was said to suffer from headaches, but no history of any definite illness was obtained. The patient spoke no English, and a detailed history was therefore difficult to obtain, but both the patient and her friends stated positively that her sight was perfectly good three weeks previously.

When admitted there was general haziness of both lenses, with striæ of greater density. V. = $\frac{2}{9}$. The patient was anæmic, of sallow complexion, and complained of headache and nausea. Both capsules were freely lacerated, and the lenses broken up with two needles. The pupils were kept well dilated with atropine, and a week later there was no irritation. The patient's general condition, however, had not improved, and her depression had increased. The soft matter was now removed by suction in both eyes; a very small quantity, however, remained behind in the right eye. A good deal of irritation followed the operation, and in the right eye there was much pain and ciliary congestion; the pupil became blocked with lymph and soft lens matter. On the sixth day after the suction operation, Mr. Carter being unable to attend the hospital for a few days, Mr. Frost attempted an iridectomy, but, owing to the rotten condition of the iris, which was pushed forwards, no definite portion could be removed. Some of the contents of the anterior chamber were removed by suction, but the greater part was too thick to flow through the cannula. The congestion remained undiminished, the cornea became infiltrated with pus, and the globe shrank. In the left eye a considerable amount of irritation followed the suction operation; this subsided, leaving a pupil closed by lymph. The annual cleaning of the hospital necessitated the patient's removal from ward to ward, and as it was, under these circumstances, impossible to obtain nurses who could understand her, and her mental depression was very great, she was discharged, and further measures on the left eye were postponed. She was afterwards admitted into another hospital for an iridectomy with division of the layer of lymph in the left eye.

Remarks by Mr. FROST.—These two cases are remarkable for the rapidity with which the cataracts progressed. In a matter of this kind, of course a patient's statement must

be accepted with caution, but in the first case the consistent manner in which the patient and her friends gave the date of the onset leads me to believe in its accuracy, and in the second the good vision of the patient three weeks before her admission was proved. Lately I have seen several cases in young adults—females—in which flocculent-looking opacities in the lens have come on rapidly without any apparent changes in the choroid and vitreous; in most of them there was some disordered menstruation, but the number of cases is insufficient to determine whether this is accidental or not. I have, however, never seen a case in which the whole lens became opaque in so short a time. The second case is important as showing what disastrous results may follow a suction operation. Mr. Carter tells me that many years ago he lost an eye after this operation, and believing that he had discovered the cause in septic infection by the suction curette, he has since always disinfected the instrument immediately before use. This precaution was taken in this case, and the untoward result is probably to be attributed to the general condition of the patient. Unable to see and surrounded by strangers, with whom she was unable to exchange ideas, she sank into a moping and despondent condition, from which she could with difficulty be roused to take nourishment. The rapid onset of the cataracts points, no doubt, to malnutrition and low reparative power; but the happy result of the preceding case shows that this alone is insufficient to account for the course the case took. Possibly, if it had been possible to converse freely with the patient, some cause would have been discovered for her extremely depressed condition, which was at the time attributed to her loss of sight. The removal of lens matter by suction is an operation which is very frequently performed, but the above and the two cases recorded by Mr. Carter ("Diseases of the Eye," 1875, p. 365) are the only ones in which I am aware of any untoward results having followed when the operation has been properly performed.

NORTH STAFFORDSHIRE INFIRMARY.

THREE CASES OF EXCISION OF THE TONGUE, WITH REMARKS ON THE VARIOUS MODES OF REMOVING THE TONGUE.

(Under the care of Mr. WILLIAM DUNNETT SPANTON.)

THE best method of removing the tongue is still an open question, and appears a fair subject for discussion.

CASE 1.—Betsy D——, married, aged forty, residing in the country, was admitted in December, 1875. She was in a delicate state of health, had never been very strong, having had a family of eleven children quickly; the last child born ten months previously, and she had suckled the child most of the time. She was also suffering from more or less menorrhagia. She stated that about two months before she had first noticed a spot on the left side of the tongue like a blister. It was hard, and for many months gave no pain or trouble. At the end of a year an ulcer formed, which soon began to spread and cause pain. On examining the tongue the left side was found to be involved by a large excavated ulcer the size of a date, with hardened edges and bleeding on the slightest touch. In the right half was a nodule the size of a horse-bean, hard and tender. No enlargement of glands, speech much impaired, and there was a copious flow of muddy offensive saliva. No history of syphilis. She was under treatment for some time before admission, and was advised six months before to have the tongue removed, but some domestic circumstances caused the operation to be postponed until Dec. 23rd. Chloroform was then administered, and the patient was placed in the semi-recumbent posture, the mouth was kept open by a screw gag, a stout ligature passed through the tip of the tongue. The mucous membrane of the floor of the mouth was freely divided round the lower jaw with scissors, the genio-hyoglossus and hyoglossal muscles cut through, and separated more completely by the finger. A needle having previously been placed through the base of the tongue, the chain of an écraseur was passed round the base of the tongue as low down as possible, and behind the needle. The chain was made to cut through slowly, and apart from the bleeding caused by the division of the muscles there was no hæmorrhage. The surrounding tissues, after removal, were found soft and healthy feeling. The patient bore the operation well, after which she was enjoined not to attempt to speak. A very simple milk diet was ordered, and the mouth to be frequently washed out with a lotion of iodate of calcium (one grain to one ounce). On the following day she could swallow comfortably. There had been no hæmorrhage, and she had slept well. Pulse 80; temperature 98·6° F.

On the 27th she was progressing well; the surface of the root of the tongue was beginning to suppurate; deglutition was easy and painless. Temperature 98° F. On Jan. 1st, 1876, four days after the operation, the wound looked healthy, but granulating with slight suppuration; profuse flow of saliva; no fetor. General health much improved, and the patient anxious to be up. From that time improvement was steadily progressive; she gained flesh, and when she returned home a month afterwards was in better health and far more comfortable than she had been for eighteen months before. She could speak rather more plainly than before the operation; the copious flow of saliva continued, but was free from any peculiar offensiveness. She attended from time to time, and kept very well until she had the misfortune to become pregnant again. This was the signal for a fresh inroad of disease in the submaxillary and cervical glands, from which, soon after she had given birth to her twelfth child, she died, about eighteen months after the operation.

CASE 2.—George W——, aged fifty, living at Hanley, was admitted in December, 1878. The family history was good. He had been a smoker, but not for some years. A brownish spot on the tongue was first observed nine months previously. This gradually increased and began to ulcerate three months afterwards. On admission the right half of the tongue was covered with a foul ulcer, surrounded by infiltrated tissue, which extended towards the left side beyond the middle line. It was hard and very painful, so much so that the patient had eaten no solid food for more than three months. The submaxillary glands were slightly enlarged and tender. There was profuse offensive salivary discharge. On December 12th, at the patient's urgent request, the tongue was removed under the influence of chloroform, in the same manner as in the case above described. There was no hæmorrhage except the bleeding caused by division of the floor of the mouth, which was very trifling.

On the 14th he was free from pain, and was able to sleep naturally for the first time for many weeks. On the 22nd the slough had separated and solid food was taken, and next day he left the infirmary, the surface of the wound looking healthy; glands still enlarged but not painful.

This patient was seen from time to time at his own home, and he continued comfortable until March, 1879, when the disease extended to the fauces, and the glands of the neck became extensively implicated, and at the end of May he died, about five months after operation. Although in this case the respite was not a long one, the patient repeatedly stated that he was thankful for the operation, so great was the relief he obtained. It was infinitely more tolerable even at the last to have a swollen neck and throat rather than a loathsome mass filling up his mouth.

CASE 3.—Edward H——, aged thirty-four, living at Mow Cop, was admitted on September 12th, 1879. The family history was good. He had been a smoker many years. There was no distinct history of syphilis, though he had thirteen years before had a slight sore, which healed quickly and was never followed by any secondary symptoms. He first noticed a hard nodule in the right side of the tongue three months before admission. This soon ulcerated and caused great pain. The tongue on admission was found ulcerated over the right side for the greater part of its extent, with a hardened base; and there was a hardened nodule on the left side of the tongue. The discharge was profuse and offensive. The glands of the neck were slightly enlarged and painful. A decayed tooth was removed, and a mixture was ordered to be taken three times a day containing fifteen grains of iodide of potassium with a drachm of the solution of perchloride of mercury in decoction of yellow bark. The mouth to be washed out frequently with a lotion of chlorate of potash.

On September 27th, this treatment having produced no beneficial effect, the tongue was removed. The operation was commenced by an incision made to the extent of about two inches and a half from the right angle of the mouth across the cheek, reaching to the edge of the masseter muscle. This procedure facilitated the subsequent steps of the operation, which were the same as in the two previous cases. The cheek wound was secured by two harelip pins

and a figure-of-eight suture. There was no hæmorrhage beyond the usual small amount from the mucous membrane of the mouth at the time, but about four hours afterwards active hæmorrhage set in, causing the patient to lose about ten ounces of blood before it could be controlled. By reopening the cheek-wound the bleeding vessel was readily secured and ligatured, and there was no recurrence. The great use of the cheek-opening was then appreciated, for it would have been almost impossible to have secured the vessel without it.

On the 28th he had slept well and felt comfortable. The wound in the cheek which had been left open was reunited. The mouth was syringed out frequently with chlorate of potash lotion.

On Oct. 3rd the cheek wound was quite healed. The slough in mouth was separating. He had no pain, and took beef-tea and milk food freely.

On the 9th he spoke without pain; the slough had separated. The glands were smaller and painless.

On the 17th he returned home with the surface healed; glands were still slightly enlarged, and there was free discharge of saliva, but quite inoffensive.

On Nov. 23rd he was quite well; all swelling and pain gone.

Remarks by Mr. SPANTON.—These cases afford a fair illustration of the mode of treatment which I desire to advocate. But before entering into that question, a few remarks on the desirability of any operation at all in cases of this description may not be out of place. I have found among many surgeons a prejudice against any surgical interference. They will tell you that your patient is sure to die before long if you do operate, and under such painful conditions life is hardly worth prolonging. But what are the facts? Take an ordinary instance of cancer of the tongue, allowed to run its natural course uninfluenced by operation, and you will find in the decisive words of Mr. Erichsen ("Science and Art of Surgery," vol. ii., p. 427) that "nothing can exceed the misery of the patient's death, brought about as it is by pain, hæmorrhage, and starvation." And how long does such a frightful condition of misery last? It has been found, from a large number of statistics quoted in Mr. Clarke's work ("Diseases of the Tongue," p. 140), that the average duration of the disease, operated on or not, is fifty-seven weeks; the shortest, recorded at the Middlesex Hospital, being fourteen weeks, the longest extending over six years. With this distinction, however, that of those cases not operated on the average duration is only forty-two weeks, while that in which an operation has been resorted to is eighty-six weeks, the longest of these reaching to six years. Sir James Paget mentions an instance of longer immunity after operation.

In the first case I have related it is interesting to observe how pregnancy and suckling seemed to hasten the inroad of the disease, as is almost invariably the case; although theoretically one would have imagined that on the principle of starving the diseased parts, such conditions ought to have an opposite effect. It is, however, a matter of everyday observation to find pregnancy and its sequences especially powerful for evil in any devitalising disease. Having digressed so far, I come back to the question of treatment. If statistics prove anything, they assuredly go to show that in this affection a patient left alone has to look forward to possibly forty-two weeks of the most abject misery and suffering, which only those who have seen it can fairly appreciate; while on the other hand, if a complete operation be performed, our patient may fairly count on obtaining for some months at least immunity from suffering, and a life of comparative comfort. If recurrence of the disease should occur, it is usually in the glands or internal organs, and death takes place under infinitely less distressing conditions than would otherwise have been the case.

The gratitude expressed by those persons who have been relieved of the painful affection is a sufficient testimony, I think, to the desirability of removal. And inasmuch as we have to deal with a malignant, albeit localised disease, the obvious course is to remove it as speedily as possible; or, in the words of the late Mr. De Morgan, "to operate early" and "to operate thoroughly." Partial operations on the tongue, like imperfect operations for cancer elsewhere, have been almost uniformly unsatisfactory. Having decided on the removal of the organ, various methods offer themselves. My own conviction is that in this, as in most surgical procedures, the simplest measures are the best; and I cannot yet understand why it should be necessary to perform a complicated operation such as I will presently describe, when a far simpler one will answer the purpose equally well.

It would be interesting, if it were possible, to compare the results of the various procedures which have been adopted. That some are attended with a high rate of mortality I am quite convinced, and to this circumstance, in great measure, we may, I think, attribute the reluctance which many surgeons entertain in advising their patients to submit to excision.

The chief plans may be divided into four groups—

1. Removal through the mouth.
2. By an opening below the chin.
3. By dividing the lower jaw.
4. By combining tracheotomy with the third method.

We will take the last of these first. It was first practised in Germany, and has been advocated recently by Mr. Arthur Barker in a paper in THE LANCET, August 16th and 23rd, 1879. Mr. Barker there states that he has been struck by the number of deaths occurring after operations on the tongue from "septic pneumonia, with, in some instances, gangrene and abscess of the lung." This he attributes to the inhalation by the patient of the "*acrid fumes given off from a quantity of putrid material in the mouth, day after day, and night after night.*" (The italics are mine.) "Irritated at first," he says, "they become, under a continuance of the supply of the poison, intensely inflamed, and rapidly run through the several stages of pneumonia and gangrene." This opinion is supported by statistics quoted from Dr. Schläpfer, who has collected fifty cases recorded in various journals, with an entire mortality of 22 per cent., of which 12 per cent. were ascribed to various forms of septic lung mischief; also by some statistics of University College Hospital, which show that of twenty-one cases operated on for epithelioma of the tongue eight died, of whom five succumbed from lung complications, a rate of mortality of 23·8 per cent. from that cause alone.

Upon premisses such as these Mr. Barker has come to the conclusion that to obviate this very high (and I should hope unusual) death-rate, the rational method is to arrange the operative procedures in such a way that all chances of septic poisoning shall be excluded. And this is how he accomplishes it, as described in his own words:—"A Trendelenburg's cannula was inserted and inflated, and subsequently the tongue was removed, after division of the lip, jaw, and soft parts, down nearly to the hyoid bone. It was removed in two transverse sweeps of the knife, cutting half of the organ at a time, to allow of each lingual artery being ligatured separately. The next day the nostrils were plugged with cotton-wool, and the mouth closed and covered with a well-fitting pad. A silver drainage-tube was also adjusted in the floor of the mouth, over the end of which a rubber tube was fitted to carry off all discharge from the mouth into a basin of Condy's fluid at the bedside. He was then obliged to breathe by the tracheal opening, and by it alone. This was kept up for several days, until the stump of the tongue, &c., was comparatively clean. Later he was allowed to breathe by the nose alone (the mouth being kept still strictly closed and padded), and the tracheal wound was allowed to close. Finally, the pad was removed from the mouth." There was on two occasions some oozing, requiring the application of perchloride of iron, and there was a rise of temperature to 103°. This was considered to depend on an alveolar abscess, and relieved by extraction of some loose teeth. Convalescence was rendered tedious by exfoliation of two pieces of bone. In one case the drainage-tube was retained thirteen days.

Now, I should like to ask why at the time the patient had in his mouth a putrefying malignant sore, with poisonous breath and discharge, no pneumonic or septic symptoms occurred? And, further, why such symptoms should be looked for from a granulating surface, such as we usually have after removal of the tongue? Can anyone for a moment suppose that a fresh cut surface, and presumably a healthy one, could "exhale" such "irritating" or "acrid fumes" as would provoke pneumonia? I venture to assert that such a proposition is absurd. If "septic pneumonia" occurred, surely it would be in the way in which it usually arises after operation—i.e. from direct absorption of some morbid material into the blood. But why should such a condition be possible? Suppose the air of the ward to be in a proper condition, and you disinfect the wound in the mouth as it ought to be disinfected, and as in the cases I have recorded it was, what possibility can there be of any "acrid fumes," or

even of any putrid material which could by any means lead to blood-poisoning, or lung-poisoning either?

It seems to me that in the operation Mr. Barker has proposed he has adopted, to begin with, a practice which has, I think, been properly designated "a relic of a barbarous state of surgery" ("On a Painless Method of Excising the whole Tongue," by Richard Barwell, F.R.C.S., THE LANCET, 1879, p 549), and he has in addition to this further complicated it by opening the trachea, so that the patient incurs great risks, altogether foreign to the operation (in the shape of acute pneumonia, &c.); and also by adding to these an unnecessary meddling and paingiving method of carrying out the daily details of treatment. What better drainage-tube can you have than the open mouth? Drainage-tubes are not always models of perfection, according to Mr. Savory; and suppose an obstructed one in such a case as this, and what will happen? The patient will of course have to retain the very material which most of us are anxious to get away, and become very certainly poisoned. There is some truth in the assertion with regard to the offensive discharge no doubt; but this is, I believe, to be attributed not to the cut surface of the tongue, but to the needless compound fracture of jaw. There I think lies the secret. Let the bone alone, and adopting Mr. Barker's theory, you will need no such cumbrous and dangerous complications as tracheotomy and its multifarious accompaniments.

This brings me to consider the next method, No. 3. The plan of dividing the lower lip and symphysis menti devised by Sédillot, and improved upon by Syme, has been almost exclusively followed by the Scotch surgeons, and to this day a large number of operators adhere to it. The words of Mr. Barwell already quoted sufficiently express its character, though there may no doubt be some cases in which it may be required. In the majority of instances, however, it would appear as unwise as it is unnecessary to divide bone with all its attendant risks, when the object can be attained equally well without. The rate of mortality attending it is high, as we might expect, and the wound of bone must be held accountable I think, for many of the cases of septic lung mischief which are reported.

In Group 2, which I need not describe, we find many advocates, notably the late Mr. Nunneley, who was content with a small opening, through which he passed the écraseur, chain or wire; and although I cannot discover any statistics of his cases, they are said to have been mostly successful. Other surgeons have followed the same method in a more or less modified fashion. Mr. Barwell claims for his modification of it (*loc. cit.*) that it is painless, as he takes care in the earlier stages of it to divide the lingual-gustatory nerves. But I fail to perceive how the preliminary incision under the chin, and the passing through of threads and wire of the écraseur into the back of the mouth, can be effected without pain, and for the rest the same claim will apply to other methods in which the lingual-gustatory nerves are divided, be the preliminary proceedings what they may.

Now, we come to the first method I named, that of excising through the mouth with or without a buccal incision. Various ways of effecting this have been practised. The knife is, as Mr. Fairlie Clarke says, "the surest and the most expeditious," but he wisely refrains from adding, the safest. It necessitates abstention from an anæsthetic, and under any circumstances is liable to be attended with dangerous hæmorrhage. (It is, of course, understood that I am not now referring to partial operations on the tongue, in which probably the knife is the most useful.) Of the galvano-cautery I have had no experience. It is said to be very good and safe, although I have lately heard of a case operated on by this method which was followed by sharp hæmorrhage, necessitating ligature of the vessels. The old plan of ligature is now almost discarded, except for disease of the anterior portion; and it seems to me the sooner it is wholly discarded the better. It is painful, it is particularly disagreeable to the patient, and almost tempts septic mischief. Then there is the écraseur, for which we are indebted to Chassaignac. With this useful instrument the organ may be safely removed with little risk of hæmorrhage, and without difficulty. In the cases recorded I have described the manner in which I used it, and it need not be repeated here. I cannot conceive anything more simple or more satisfactory. There are, however, one or two points to which I desire to call attention. In my second case I experienced some difficulty owing to the large size of the patient's tongue. It seemed, when grasped by the écraseur, to fill the mouth, and interfere with breathing. At the same time it rendered difficult any attempt to feel or to see how the chain was working. As the result shows, this did not interfere with the success of the operation, but it led me to determine in my next case to lay open the cheek. We all know how very readily any cheek wound heals, so that there was nothing to deter one on that score. I found, as I had anticipated, that laying open the cheek enabled me to see the working of the chain during the whole time, gave room for passing in the fixing pins quite easily, and for the escape of any bleeding, &c.; and more than that, allowed free room for the patient to breathe. The operation was rendered very much easier for the operator, and I think safer for the patient. The proceeding is one I strongly recommend. The principal points are to divide the structures of the floor of the mouth freely, so as to be able to draw the tongue well forward without force; to work the écraseur chain from the front so as to divide the base as evenly as possible; to work the instrument slowly, and to administer an anæsthetic. With regard to after-treatment, it was very simple in the cases recorded. Frequent syringing or washing of the mouth with some antiseptic or disinfectant; frequent administration of milk and beef-tea, and keeping the mouth open as much as possible, but not permitting the patient to attempt to speak for a few days. In no case was there any symptom of irritation (the highest temperature was 99° F.), or the slightest approach to septic mischief, and the patients were in each instance up and about in a very few days. Would any of the other methods of treatment have yielded equally good results?

Medical Societies.

CLINICAL SOCIETY OF LONDON.

Ununited Fracture of the Olecranon treated by Suture of the Bones.—Chromidrosis.—Stretching of Facial Nerve for Spasmodic Tic.—Excision of Breast in Intractable Eczema of the Nipple.

THE last meeting of this Society for the session was held on May 27th, J. Lister, Esq., F.R.S., President, in the chair.

Mr. MACCORMAC read notes of a case of Ununited Fracture of the Olecranon Process, in which Bony Union was obtained by Sutures of the Bones. The patient (who was exhibited) was a piano-tuner, twenty-six years of age, who four months before coming to St. Thomas's Hospital had fallen upon the right elbow, and sustained a fracture of the olecranon. When admitted the limb was wasted, especially the triceps; there was no power of active extension; the line of fracture ran across the base of the olecranon, the detached portion being separated by two inches, and fixed to the back of the humerus, the condyles of which could be felt in the gap, no uniting medium being perceptible. On Jan. 6th Mr. MacCormac made a vertical incision three inches long, exposing the fractured bone and the articulation. There was no trace of uniting material, the fractured surfaces were covered with smooth fibrous tissue, and adhesions existed between the detached process and the condyles, and also between the end of the humerus and ulna. These adhesions were dissected out, and the periosteum being reflected, a thin layer of bone was cut off with a chisel, and by means of two wire sutures through holes drilled in the bone the surfaces were brought into close apposition. The wires were twisted and cut off so as to project at the centre of the wound, which was afterwards closed with catgut sutures. The operation was performed antiseptically, the joint being washed out with carbolic solution (1 in 30) before closing the wound. The first dressing was made on the fifth day, when the wound was found to be united, except where the bone-sutures emerged, and these were removed in twenty-one days. In forty days the patient left the hospital with very good active movement at the elbow-joint, and apparently firm bony union at the seat of fracture. From first to last he had no pain or inconvenience. The wound healed without a drop of pus; the temperature occasionally rose to 99·8°; it was otherwise normal throughout. He has now perfect power of active extension. The arm cannot be made absolutely straight, but he is able to follow his trade as well

as before.—Mr. LISTER believed he was the first to perform an operation of a similar nature many years ago in Edinburgh. The patient was an engineer in the prime of life, who had sustained a fracture of the olecranon. Mr. Lister exposed the ends of the fragments by a longitudinal incision; and after paring away the surfaces, drilled the fragments and tied them together by strong silver wire, using a single suture, which was more convenient than a double suture, for it remained in the line of incision. The result was, as in Mr. MacCormac's case, there was no inflammatory or constitutional disturbance. The man left with bony union and resumed his occupation. Since then, at King's College Hospital, he had similarly treated another case with like result. In neither was the upper fragment fixed to the humerus, as in Mr. MacCormac's case; nor was the separation between the fragments so wide. It was refreshing to hear antiseptic dressings spoken of as a matter of course; but he supposed few members of the Society would perform such an operation as the free opening of a joint without such anti-septic precautions as we possess, which afforded such security against complications.

Dr. T. COLCOTT FOX then read a paper founded on two cases of Chromidrosis, in which a deep blue-black pigment exuded upon the skin of the circumorbital region. The paper was illustrated by several beautiful drawings kindly lent the author by Dr. Foot, the President of the Pathological Society of Dublin. One case occurred in a girl aged eighteen years, a partial deaf-mute, but otherwise intelligent and of good physique, who presented herself amongst Dr. Donkin's out patients at the Westminster Hospital, for the relief of a conspicuous and symmetrical black pigmentation of the eyelids and considerable portion of the adjoining cheeks, which caused great concern to the girl and her friends. The catamenia appeared first at the age of fifteen, and had never since been regular in time or quantity, and since that age the girl had suffered from general malaise, severe headache, and very marked habitual constipation. She was not an hysterical subject. The pigmentation was first noticed in September, 1880, on the lower lids, whence it gradually spread over the adjoining portions of the cheeks. Through the kindness of Drs. Sturges and Donkin she was placed under observation in the Westminster Hospital on three occasions, and it was found that the pigmentation varied considerably in amount and intensity, though present in some degree almost continuously. It was always less at the catamenial periods, but seemed to bear a direct relation to the very obstinate constipation, and was more intense and extended the longer the interval between the relief of the bowels. It was found on many occasions that whenever the latter became regular the pigmentation disappeared. As a proof of its genuine character Dr. Fox described the precautions taken to watch the case on one occasion for thirty-six hours, after the face had been thoroughly cleansed, but the pigmentation steadily returned. The urine was examined on several occasions for indican, which was found always to increase markedly in amount *pari passu* with the constipation and the exudation of pigment on the face. This fact, and the relation of the exudation to habitual constipation, are new points in connexion with the affection. Examination of the pigment showed it to present characters in all respects similar to those hitherto recorded in other cases by Charles Robin and others. The indian-ink-looking amorphous granules were found insoluble in almost all reagents, hot or cold, but displayed a deep blue colour when moistened with glycerine, and when dissolved in hot sulphuric acid firstly gave a beautiful purple hue, and, finally, a bistre tint. The pigment was evidently indigogenous. The second case was a girl of eighteen, sent to the author by Dr. Donkin. She was hysterical and phthisical, and suffered also from flatulent distension and constipation. The black powdery pigment afforded similar reactions to that in the first case, but the pigmentation was slighter and more fitful in appearance. In both cases any heat, emotion, &c., which determined the blood to the face, increased the pigmentation. Dr. Fox, in consideration of the fact that these were the first cases presented to a London Society with the exception of one shown by Sir Benjamin Brodie in 1845, entered into a short *résumé* of the subject and of other recorded cases, which are recorded in interesting monographs by Dr. Le Roy de Méricourt of Brest and Dr. Arthur Wynne Foot of Dublin, and insisted on the reality of the affection, which he challenged anyone to disprove. To the thirty-nine cases collected by Dr. Foot he added five others, making forty-four in all, six of them being in males and thirty-eight in females, at ages ranging between fifteen and fifty-seven years, and one a man aged twenty-two. The chief points discussed were the causation and the relation of the exudation to uterine troubles, general debility, and especially constipation; the influence of emotion, heat, &c., in increasing the pigmentation and the seat it usually occupies; the probability of the substance being exuded in a soluble form in the sweat rather than in the sebum, and its subsequent oxidation into a coloured pigment by contact with air; the varying shades of the colour (azure, deep blue, ochreous, black) of the pigment in different patients, and at different times in the same patient, the constant chemical and physical characters of the pigment, which prove it to be indigogenous and allied to similar products occurring occasionally in urine, pus, eczematous vesicles, milk, dropsical fluid, fæces, and vomit; and the arguments for and against malingering, showing, undoubtedly, that it is a real diseased condition. Lastly, Dr. Colcott Fox gave the results of the latest researches into the production of indican in the economy and its connexion with chromidrosis.—Dr. O'CONNOR asked whether there was any cutaneous hyperæsthesia or smarting, and whether the exudation was coloured from the first. The age of fifty-seven of one of Dr. Fox's patients was uncommon in these cases. In many cases uterine and other symptoms have appeared after the removal of the exuded material. He had seen one case in Dublin and one in London, and regarded the condition as one of steatorrhœa, of which there were varieties in the colour of the secretion. The black form of steatorrhœa was said to be hereditary. He asked, then, whether the sebaceous glands were affected, and thought it bore some relation to the condition of vitiligoidea, described by Addison and Gull.—Dr. CAVAFY had not the slightest doubt as to its being a genuine affection. The secretions of sweat and of urine had much in common, and he was glad that Dr. Fox had had the urine of these cases thoroughly examined for indican, with the result stated. The fact of the occurrence of this condition, together with obstinate constipation, favoured the view that the pigment was of the same nature as that in the urine—viz., indican, which occurs in excess in the urine during constipation. But indican appears in the urine under other conditions. Senator and Jaffe have found it in all chronic wasting diseases, in diabetes, in the later stages of carcinoma and in phthisis. It would be interesting to know if any of these coloured sweats occurred in phthisical people. By analogy similar explanations may be given for other coloured sweats. Red sweat may be due to an exudation analogous to hæmoglobinuria. Albumen has lately been observed in the sweat. Did Dr. Fox collect any of the fluid exuded, and, if so, did he find bacteria in it? For in one case in Germany chromogenous bacteria were found, and it was known that such chromogenous bacteria occurred in blue pus. The fact of emotion being followed by the outpouring of this blue sweat pointed to the occurrence of a local sweat centre, which can often be excited in a reflex way by the application of pungent substances to the tongue.—Mr. STARTIN asked if the coloured sweat occurred in other parts of the body. In a case under Dr. Payne, a woman aged forty, where there was uterine disease, there was coloured sweating over a limited area in each axilla. He suggested that a ferment was produced through the nervous influence, and that the indican became thereby oxidised.—Mr. LISTER, in his observations on blue milk, had thought it possible that the colour was due to the presence of bacteria, which were not themselves coloured; but in the present cases the colouration was related to nervous influences, and could hardly be supposed to be due to bacteria.—Dr. FOX, in reply, said that there was very little, if any, altered sensation in his cases. It was impossible to say whether the pigment was exuded from the sweat or from the sebaceous glands, but it contained no oily matter, which was evidence against its being a steatorrhœa, as Neligan supposed. No constitutional disturbance followed the removal of the pigment. In one of the cases Dr. Donkin found evidence of early phthisis. No bacteria were found in the pigment, and the effect of emotion in producing it was very marked. The indican rapidly became oxidised on exposure to air, and if its occurrence in sweat be admitted, there would be no difficulty in explaining the deposition of the pigment. The axillary secretion is naturally coloured.—Dr. O'CONNOR added, that in Sir B. Brodie's case Dr. Owen Rees found fatty matter in the deposit.

Mr. GODLEE read a short account of the progress of the

case of Stretching of the Facial Nerve for Tic Spasmodique, elated by himself and Dr. Allen Sturge early in the session. The patient on whom the operation was performed remained perfectly well till a month ago, then slight twitching of the obicularis palpebrarum occurred in connexion with great mental worry; it was accompanied by some supraorbital neuralgia. A blister was applied above the eye and quinine was administered. The twitching has recurred once since that time again in connexion with a mental shock, but it has now disappeared again, the patient only having some stiffness about the eye, and difficulty in opening it when exposed to a cold wind. Another patient mentioned in the paper on whom Mr. Godlee had stretched first one and then the other facial nerve was also referred to, but as his case is not yet complete it was decided to postpone a detailed account of it till next session.—Dr. DOWSE said the recurrence of the affection bore out the experience of half a century in reference to nerve section in neuralgic and spasmodic tic; for invariably the affection has returned after a time. He had seen several such cases, and thought neither stretching nor division of nerves satisfactory. In cases of severe epileptiform neuralgia he had found the removal of exciting causes—e.g., carious teeth—to be the best treatment.—Mr. LISTER pointed out that nerve division and nerve stretching did not come under the same category. The remarkable fact was that the less violent measure was followed by the more permanent benefit; for recurrence of the affection invariably took place (sometimes very soon) after division, or even excision of a considerable length of nerve. But stretching in some cases—e.g., Nussbaum's—was actually curative. The case of Dr. Sturge and Mr. Godlee could hardly be said to be a failure, for both the slight recurrences of twitching had been dependent on derangement of health.—Mr. GODLEE, in reply, said that the patient had been treated by many physicians for four or five years without relief. The operation was not a serious one, and does not permanently lame the patient, who in this case has had one year at least of absolute comfort. The return of the twitching had depended on some nervous shock, and it was hoped that it would not be permanent. The relief obtained from the pains of ataxics by stretching the sciatic justified the operation, even if that relief were only temporary.

Mr. GEO. LAWSON exhibited a Breast, which he had removed on account of long-standing eczema of the nipple. In the reports of the Society for last year, after recording a case in which cancer had followed an intractable eczema of the nipple, he suggested that in cases of eczema of the nipple which have resisted for a length of time all treatment "the breast should be removed in anticipation of a disease which does not then exist." The case which he had now to relate was that of a lady who suffered from eczema of the nipple, which had resisted all treatment for over twelve months, and was extending. Feeling that the usual termination of such cases was diffused cancer, Mr. Lawson advised, and accordingly removed the breast. There was a red, scaly patch raised slightly above the level of the skin, and extending for about two inches around the nipple. The breast was examined by Dr. Thin, and he discovered cancer elements diffused throughout the organ. The preparation is now in the College of Surgeons' Museum.—Mr. LISTER thought the line of practice a serious one if meant to apply to all cases of eczema of the nipple. But he was not long ago consulted by a lady for eczema of the nipple, which he treated by local applications; but he heard afterwards that cancer had developed. At the same time he would hesitate about advising the removal of the whole breast in cases even of obstinate eczema of the nipple. In Mr. Lawson's case it did not appear that the breast was the seat of scirrhous cancer.—Mr. LAWSON said that he advocated excision of the breast in cases where the eczema of the nipple had resisted all treatment.

OBSTETRICAL SOCIETY OF LONDON.

AT the meeting on May 4th, 1881 (Dr. Matthews Duncan, President, in the chair),

Dr. GALABIN showed, for Dr. JOHN BASSETT, two specimens: (1) The Placenta from a Case of Triplets. On the fœtal side were attached three umbilical cords, and the remains of three sets of membranes, without any appearance of separation in the placenta. (2) A Fœtus with the Placenta adhering to the Cerebral Membranes. The vault of the skull was absent, and no brain substance was developed. The placenta, which was prævious, adhered to the cerebral membranes. These membranes contained some fluid. The child was delivered by version, and breathed for about an hour.

Dr. MEADOWS showed Pessaries made of the new material xylenite, a compound of paper and nitro-glycerine. It was more elastic than vulcanite, and could be more completely softened for moulding by boiling water.

Dr. GODSON exhibited a new apparatus for applying heat or cold to the surface of the body. It was known by the name of Leiter's Temperature Regulator, and consisted of a coil of pliable, metallic tubing, which could be adapted to different parts. A continuous stream of hot or cold water could be circulated through it. He thought it might be valuable in post-partum hæmorrhage.

Dr. CLEVELAND showed a cylindrical Fleshy Substance, about three inches by three-quarters of an inch. It had a remarkable resemblance to a uterus, having a mouth with lips at one end and a central canal. It was expelled with pains and slight hæmorrhage three days after delivery of a seven months' child. The lady, who had borne previously eight children, said that in her last two labours a similar substance, but rather larger, had been expelled on the third day.

The PRESIDENT narrated a case of Phlegmasia Dolens with Lymphatic Varix. He was disposed to support the view of Tilbury Fox and others, that phlegmasia dolens is due to venous and lymphatic inflammation and obstruction, and that, of these two, the lymphatic disease is the more important, especially as being probably present in every case, while the venous disease is occasionally absent. The case of white leg occurred in the downward progress of a characteristic case of cancer of the womb. During its presence there appeared lymph-angiectasis of a part of the skin of the thigh, and this disappeared as the phlegmasia disappeared. The part visibly affected was at the upper and outer part of the anterior surface of the left thigh, and constituted an oval or triangular area broader above than below, and of such extent as might be nearly covered by the hand. There was no pain or tenderness. The projecting vessels, covered by epidermis, and having a yellowish-white tint and pearly lustre, were seen and felt, and the prick of the small point of a knife allowed a large drop of limpid lymph to immediately exude. A similar affection of lymphatics occurred during a slight attack of phlegmasia in the right limb, which began as the disease was slowly disappearing from the left. The lymph-angiectasis occurred in an area of skin mechanically weakened by being the seat of closely set spindle-shaped, ribbon-like skin cracks. These cracks were obscured by the lymphatic distension, and did not subsequently become again visible as skin cracks, except in small parts. The lymph-angiectasis was probably the result of general lymphatic tension in the whole limb, the special varicose lymphatics becoming so in consequence of being imperfectly supported by the weakened cracked skin. Similar phenomena were observed in the abdominal skin cracks of pregnancy under circumstances not regarded as morbid.—Dr. PLAYFAIR said that many clinical facts proved that thrombosis of the veins was not of itself sufficient to account for the phenomena of the disease. Thus, there were cases of thrombosis of the veins of the lower extremities, occurring in gouty subjects, in connexion with which nothing like phlegmasia dolens was observed. Dr. Duncan's cases showed the probably intimate connexion between a certain amount of septic absorption and phlegmasia, which was not uncommon in connexion with cancer of the uterus. He did not think that there was ground for assuming that lymphatic obstruction had more to do with phlegmasia than venous obstruction. He had never seen any lymph-angiectasis in puerperal cases, and in some instances thrombosis of pulmonary arteries preceded the phlegmasia.—Dr. GRAILY HEWITT thought there was no doubt that, in typical cases of this disease, both lymphatics and veins were affected. It was known that the venous obstruction originated in coagulation in the uterine sinuses extending to the iliac trunk, and it was probable that the lymphatic thrombosis occurred in a similar way.—The PRESIDENT would not attempt to estimate precisely the comparative influence in phlegmasia of venous and of lymphatic obstruction. He would only say that, while sometimes venous obstruction was certainly absent, we could not say the same of lymphatic obstruction.

Dr. GALABIN brought forward a Case of Extra-uterine

associated with Intra-uterine Fœtation, in which Abdominal Section was performed. The patient was thirty-six years old, was married in the spring of 1878, in the summer of that year had an abortion, and in April, 1879, was delivered by forceps of a full-term child. She expected her second confinement in September, 1880, and engaged Mr. Thomas Duke of Rugby to attend her. During the fourth and fifth months of pregnancy she had considerable pain and tenderness in the right side of the abdomen. Two tumours were discovered; that on the left side gave the usual evidences of fœtal life, and was clearly the pregnant uterus. Over the tumour on the right side nothing could be heard by auscultation, and Mr. Duke, as well as several other medical men who examined the patient, concluded that the case was probably one of an ovarian tumour complicating pregnancy. On June 16th symptoms of rupture suddenly occurred, followed by those of peritonitis, and the outline of the right-hand tumour was found to have disappeared. The patient's state having become very critical the author was sent for, and reached Rugby on the evening of the 19th. He was inclined, from the history, to agree with the diagnosis of ruptured ovarian cyst; but the possibility of combined extra- and intra-uterine fœtation existing was suggested. He advised an exploratory operation as the only chance for life, and performed this on the morning of the 20th. A large quantity of blood and clot was found in the peritoneal cavity, and an extra-uterine fœtus contained only in its thin membranes. The placenta, attached to the back of the pregnant uterus and posterior surface of the right broad ligament, was left *in situ*, and a drainage-tube placed in the wound, entering the general peritoneal cavity. The operation was performed under carbolic spray. The patient appeared to be doing well for the first two days, and the temperature never rose above 99·8°. Labour, however, came on on the morning of the 22nd, and a child, which presented by the breech, was delivered stillborn. Though there was very little hæmorrhage by the vagina a great deal occurred through the drainage-tube. On the 23rd the temperature was normal, but hæmorrhage still went on through the drainage-tube, and she died, apparently from loss of blood, on the 24th. The author attributed the secondary hæmorrhage to the shrinking of the uterus in the expulsion of the fœtus, and consequent further detachment of the extra-uterine placenta from its posterior wall. Both fœtuses appeared to be of about six months and a half development, but the extra-uterine fœtus weighed only one pound and a half, the intra-uterine two pounds and three-quarters. A review was appended of similar recorded cases, in all of which the extra-uterine pregnancy appeared to have been of the abdominal form, while in none of them was a complete diagnosis made, while both fœtuses remained within the abdomen.—Dr. ROUTH congratulated the author on his skill and powers of diagnosis. It appeared that death was due to the further detachment of the placenta in labour, and he suggested that it would have been expedient to re-open the abdomen and arrest hæmorrhage by the actual cautery. He had seen adhesions in ovariotomy, even adhesions to the liver, successfully treated by the actual cautery.—The PRESIDENT regarded uncontrollable hæmorrhage as the great difficulty in surgical interference with extra-uterine pregnancy, and this even many months after the death of the fœtus. He did not look with much hope on the actual cautery as a means of arresting this or any kind of hæmorrhage, as he had used it, and seen it used, in vain.—Dr. GALABIN said that on account of the distance of the patient he had not had the opportunity of deciding on the expediency of re-opening the abdomen. He thought that a styptic, such as perchloride of iron, would be more effectual than the actual cautery in arresting hæmorrhage in such a case.

Dr. GEORGE RIGDEN read a paper "On Midwifery in Private Practice during Forty-three Years." 5682 mothers were delivered of 5751 children—viz., 2947 males and 2804 females; 65 were twin cases, and there were 2 cases of triplets. 5422 children presented by some part of the head, including the face; 156 presented by the breech; 89 by inferior, 84 by superior, extremities. There were 45 placental presentations included in the above; 255 children were still-born, 165 being premature; 105 had been dead some time; 759 were delivered by forceps; in 2 cases craniotomy had to be performed. Previous to 1860, forceps were used only once in 222 cases, while in the last twenty years they were used about once in 15 cases. The proportion of still-births was but very slightly diminished during the latter period, and the author attributed this slight advantage rather to greater experience than to the more frequent use of forceps. There were 13 maternal deaths—viz., 2 from puerperal convulsions, 5 from peritonitis, 2 from heart disease, 1 from fright, 1 from cancer of the tongue in an advanced stage, 1 from bronchitis, and 1 from scarlet fever.—Dr. EDIS thought great credit was due to Mr Rigden for his exceedingly low maternal mortality. It was curious that the proportion of stillbirths did not seem to vary with the change from ergot to forceps. He believed that the timely use of forceps diminished materially both infant and maternal mortality, especially in large cities.

Reviews and Notices of Books.

The Factors of the Unsound Mind. By W. A. GUY, M.B., F.R.S. London: T. De la Rue and Co. 1881.

THIS is an important contribution by a physician of great learning and matured judgment to the question of the relationship of mental states to criminality. In his first chapter Dr. Guy deals with illusions of the senses, and he quotes many examples familiar enough to medical readers of perfectly sane persons who have suffered from sense-phantoms of various kinds. Dr. Guy has collected and analysed thirty-six cases of illusions. Of these twenty-eight were males and eight females, and they were of all ages, from four to eighty. Some were in robust health, others were delicate or worn by study. In some the illusions lasted for years, while in others they marked the onset of a febrile attack. The illusions had in some cases a reference to past or passing events, and in others no such reference could be traced. These illusions are not due to the workings of the imagination, but they "start into existence, a surprise and a perplexity." Dr. Guy, however, as a result of his analysis of cases, says: "Among the endowments specially mentioned in some of the most minutely described cases, an active imagination, a retentive memory, an acute perception, and a highly sensitive and sympathetic nervous organisation, are to be noted." This rule was not invariable, and many of the victims of illusions have been persons of a very opposite type. The following list of causes of illusions are given:—(1) Mental excitement and exhaustion. (2) Exhaustion of the strength by watchings, fastings, &c. (3) Convalescence from illness. (4) The onset of inflammatory disorders. (5) Disorders of alimentary canal. (6) Blood changes. (7) Certain poisons, such as alcohol, Indian hemp, and belladonna. (8) Disturbance and arrest of cerebral circulation. (9) Disease of the sense-organs. (10) Convulsive and paralytic disorders. passing allusion is also made to what the author calls *illusive transformations*—i.e., the transformation of common sights or sounds in the mind to things other than the reality. This is common enough in the insane, and is familiar also in cases of delirium tremens.

In the second chapter a delusion is defined as "*an involuntary thought, idea, or belief, without dates or premisses.*" Delusions may have their origin: (1) In illusions. (2) Sudden shock. (3) Visceral disease. (4) Excited emotions. (5) Disappointment or injury. (6) Disordered circulation or disease of the brain.

The analogy between dreaming and insanity, and the origin of the sense-phantoms and delusions of the dreamer, form the subject of the third chapter.

From dreaming, the analogue of insanity to somnambulism, the acted dream is an easy and natural transition. The facts that somnambulism has close relationships with epilepsy and insanity, that, like them, it is hereditary, and that the one condition often passes into the other, are dwelt upon. That remarkable condition, "the mesmeric state," is alluded to as showing how easily the

will may be dethroned by artifice. The chapter on delirium serves to show how both illusions and delusions may be produced by bodily conditions and causes well understood and almost reproducible at the will of anyone.

In Chapter IV. many interesting illustrations of incoherence in written and spoken language are given, and their value as evidence of insanity is insisted upon.

The relationship of epilepsy, hysteria, and other disorders which are or may be characterised by convulsive movements is brought prominently forward, and is illustrated by many apt examples chosen from the writings of physicians of all times.

The proposition that madness is often but an intensified emotion is handled with great ability, and there occur in this chapter passages which deserve to be quoted *in extenso*. The leading dispositions of mankind are comparatively few. "Innumerable combinations of these elementary characters, harmonious or discordant, make up the individuals whom we encounter in all societies of men, and in whom outward objects or inward thoughts stir up the various emotions of pleasure and pain, of hope and joy, of love and pity, of pride and vanity, of awe and veneration, of shame, fear, anger, and remorse." The abnormal growth of one side of a disposition may give us individuals "consumed by an insane fear, insane despair, insane hatred, insane love, insane jealousy." "It will be observed," says Dr. Guy, "that I have made no separate and distinct allusion to conscience and the conscientious disposition, though a knowledge of right and wrong figures so prominently in our law courts as the test of criminal responsibility. My motive for the omission is that I do not see any sufficient reason for treating conscience otherwise than as one of the groups of emotions which answer swiftly and certainly to the objects or thoughts fitted to call them into play, or if differing from them in any particular in this, that conscience is maintained in a highly sensitive state by the constant and sustained efforts of the teachers of religion. In the classes among whom vice and crime abound, and to whom the teacher of religion does not gain access, it is reasonable to expect as low a development of conscience as of the other emotions which tend to virtue." That the constant stimulation by religious exhortations, assisted by the fine arts, is sure to produce an insane growth of one side of the character, is shown by the overbearing frequency of one form or another of religious mania.

In a short chapter a few references are made to cases of delirium and nervous disorder brought about by foul air or scarcity of food. "We know," says the concluding paragraph, "that such epidemics as the dancing mania have followed in the wake of pestilence and famine, while the homicidal mania of the French Revolution, and the mixed epidemic of homicide and fire-raising which prevailed during the siege of Paris in 1870, were in part explained by the scarcity of the one period, and the famine of the other."

Dr. Guy's classification of insanity is, primarily, into the *undeveloped*, the *degenerated*, and the *disordered* mind—idiocy, imbecility, and mania. The last class it is which furnishes the debatable criminals; and as a general plea for these unhappy persons Dr. Guy puts forward the argument drawn from a consideration of the modes of origin of the factors of the unsound mind, that an apparently sane person may suffer from "epilepsies of sense, thought, and speech," as well as from convulsive epilepsies affecting the muscles. There can be no doubt of the reality of epileptic insanity, and that epileptics may and do become violent and "mad" under the influence of epileptic sense auræ. The fact that epilepsy may be produced by peripheral irritation—such, for example, as a neuroma—is illustrated by cases.

When Dr. Guy deals with the criminal lunatics, he points out that the difficulty arises mainly with two classes—the imbeciles who have criminal tendencies, and the victims of sudden maniacal impulses. The author's long connexion with Millbank Prison gives him the right to speak on the subject of punishment, and the spirit of common sense tempered with mercy which is manifested in the chapter devoted to the discussion of "the punishment of the madman" cannot but be conducive to the right understanding of a difficult matter. Dr. Guy strongly asserts that for a certain class of criminals the fear of physical suffering is the only deterrent, and he has no sympathy with those who would abolish either the gallows or the lash. Neither the one nor the other has any deterrent effect upon lunatics; and those who have advocated, as Smollett did, the "punishment" of unreasoning beings have outraged both logic and humanity. "If instead of talking of *justice* Smollett had spoken of *mercy* he would have commanded my sympathy, though I must have withheld my consent; for I know enough of madmen to believe that the very kindest thing we could do to most of them would be to kill them; and this is equally true of many a victim of hopeless incurable bodily suffering." The punishment of death has no deterrent influence on persons of unsound mind; on the contrary, there are not a few of these whose ambition it is to be hanged. It is clear, therefore, that the public safety is not enhanced by the enforcing of the law rigidly against the insane. The legal views of insanity, and the change which has been undergone by them from time to time, are passed in review in a most interesting manner.

The final chapter, that which deals with the amendment of the law, is perhaps the most practically important of all. The Criminal Code Bill has the following paragraph:—

"In order to establish a defence on the ground of insanity, it must be proved that the offender was at the time when he committed the act labouring under natural imbecility or disease of or affecting the mind to such an extent as to be incapable of appreciating the nature and quality of the act, or that the act was wrong."

Dr. Guy suggests that the attention of the Court should be concentrated on one plain question: "Is the accused of unsound mind, and was he so about the time when the act was committed—that is to say, about the time when he may be assumed to have been contemplating it?" He also urges, as others have urged, that the scientific witnesses should be appointed *by the Court*, instead of being, as is now the case, selected by prosecution or defence, and mainly on account of some opinions which they have made public. With these suggestions we think all right-thinking persons will agree.

Index Medicus. A Monthly Classified Record of the Current Medical Literature of the World. Compiled under the supervision of Dr. JOHN S. BILLINGS, Surgeon U.S. Army, and Dr. ROBERT FLETCHER. Vol. I., 1879. Vol. II., 1880. New York: Leypoldt. London: Trübner and Co.

THOUGH it is more than one hundred years since the House of Commons voted £15,000 for preparing indexes to its journals, no serious effort seems to have been made, until a few years ago, to produce a tolerably satisfactory index of scientific and medical literature. Much, it is true, has been done by Mr. W. F. Poole of New York for general literature, yet few attempts have been made to systematise and classify the enormous mass of material contained in current scientific and medical literature.

In the year 1860 the Royal Society began the publication of a "Catalogue of Scientific Papers," but the utility of the work is seriously impaired by the defective arrangement. It consists purely of an alphabetical list of authors' names, and is, therefore, almost useless for bibliographical purposes. A distinct advance was, however, made in 1877, when the New Sydenham Society published an important work, entitled "A Medical Digest," prepared with immense care and labour by Dr. Richard Neale, during a period of thirty

years. Though the "Digest" did not make any pretensions to be a complete index even to the works named therein, it did, nevertheless, practically form an index to the chief English medical periodical publications from 1837 to 1876. It contained over 90,000 distinct entries, and was itself supplied with a copious index, containing more than 9000 references. But we suspect that the work is not yet sufficiently known. This may be partly due to the fact that it is obtainable only by members of the New Sydenham Society. As we announced some weeks ago, Dr. Neale purposes, with the support of his professional brethren, to publish a new edition independently. This will be brought down to the end of the current year, and, it is estimated, will contain about 20,000 additional references, making in all more than 110,000 references to medical periodical literature of the last thirty-five years. It will then be, even more than at present, indispensable to those who wish to become acquainted with the history of medicine, surgery, and therapeutics during this important period.

The work the name of which heads this notice is of a different and more pretentious character. It is, professedly, a classified catalogue and record of all the current medical literature throughout the world. Originally started in January, 1879, it has been continued monthly in spite of serious pecuniary loss. Indeed, at the end of the first year the publisher announced that the entire subscription price (for 1879) did little more than pay for the cost of the index to the first volume. With praiseworthy courage, however, the publisher continued the Index for a second year, and again at a loss. At the beginning of the third year, however, the prospect was somewhat brighter. The sum required for the continuation of the Index having been nearly covered by subscriptions and by special contributions to the guarantee fund, the publisher determined to venture upon the publication for another year.

Several medical societies in the United States have voted special sums to a guarantee fund to meet the loss that had hitherto attended the publication of the work. We would fain hope that its success is now assured, and that the subscriptions will in future not only cover the cost of production, but leave a margin of profit. Its discontinuance would be almost a calamity for every intelligent student and practitioner of medicine. It is printed on good paper, in excellent bold type, and is a marvel of accuracy and completeness; it is a worthy complement of the Index Catalogue in course of preparation by the same authors. (See THE LANCET, Nov. 20th, 1880.)

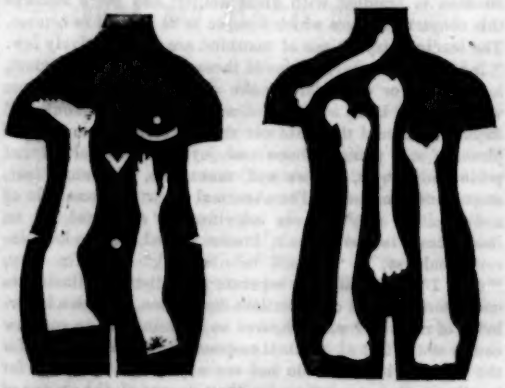
New Inventions.

NEW TUMOUR FORCEPS.

THESE forceps have been devised by Mr. Bellamy, and made by Messrs. Weiss and Son, for seizing and steadying large tumours, such as fibrous, fatty, &c., while being removed by the knife. The objects gained are great leverage, a firm grip of the mass, and ease in manipulation. It is a modification of Museaux's forceps, with more bow in the blades and lithotomy forceps' grip. The hand is liable to get tired and slippery in removing hard tough growths, and he above instrument would seem to obviate these difficulties.

GOYDER'S CLINICAL STENCIL PLATES, (REGISTERED.)

IT has always been desirable to record graphically (as well in the note-book as on the patient's board) the position of physical signs and the location of injuries. These stencil plates serve the purposes of the physician or clinical clerk by enabling him to trace outline forms of the body, male and female, on its anterior and posterior aspects. The presence of any physical sign can be depicted, and normal landmarks put in or omitted. The limbs can be drawn, and the position of any tumour, line of incision, excision, or amputation delineated. Lastly, with the plates, outlines of



the femur, tibia and fibula, humerus and clavicle, can be drawn, and, by reversing the plate, bones of the opposite side are shown. By sketching in the prominent lines on the respective bones, the anterior or posterior surface is brought out. The ends of corresponding thigh and leg bones united by a few lines show the knee-joint back and front—a joint which is often diseased, and in which morbid physical signs can be easily mapped out. The idea is not a novel one, and has, we believe, been long recommended by Dr. Gee. We would suggest that the plates should be multiplied; for in order to take an exact map of the physical signs of the thorax and abdomen, the outlines of the ribs should be indicated, or at any rate the costal margin, which cannot be done on the plates in their present form. The plates are neatly cut, and put up in a folding morocco case, with a card of instructions, by Messrs. Brady and Martin, of Newcastle-on-Tyne.

BEQUESTS AND DONATIONS TO MEDICAL CHARITIES. The Exeter Lying-in Charity has become entitled to £200 under the will of the late Mr. Wm. Miles. Surgeon-Major Newland bequeathed £1000 to Mercer's Hospital, £500 to the Hospital for Incurables, and £250 to the Medical Benevolent Fund Society of Ireland. Mr. Edward Baker, late of Clapham, bequeathed, upon the death of his widow, £300 to the Clapham Dispensary, and £200 each to the Brompton Consumption Hospital, the Royal Sea-bathing Infirmary, Margate, and the City of London Hospital for Diseases of the Chest; also the remainder of such part of his personal estate as may be by law applied for charitable purposes to the principal London hospitals, at the discretion of his trustees. The Dundee Royal Infirmary has received £200 by the will of the late Miss Whetson of that town. The funds of the Windsor Infirmary have benefited to the amount of £1000 by the will of the late Miss Louisa Reid of Hyde-park-terrace. Mr. Padmore, late of Hallow, bequeathed £500 to the Worcester Infirmary, and £100 each to the Salop Infirmary, the Worcester Dispensary, and the Worcester Ophthalmic Institution. The Newcastle-on-Tyne Throat and Ear Hospital has received £100 from a benefactor.

THE Newport Infirmary is to be enlarged to the extent of making provision for the accommodation of twenty-eight additional patients.

THE LANCET.

LONDON: SATURDAY, JUNE 4, 1881.

DR. CAMERON has given notice in the House of Commons that on an early day he shall move "a resolution condemning the conduct of the Local Government Board in refusing to take the most obvious means of encouraging revaccination, and in witnessing the compulsory closing of small-pox hospitals without causing provision to be made for the reception of small-pox patients." The aim of the resolution is excellent, and its utility would be undoubted if there were any reasonable hope that the attention of the House of Commons could at the present time be seriously interested in the question of the administrative policy of the Local Government Board with respect to small-pox in the metropolis. It would be well that the country should have some authoritative statement of the views that Board entertains respecting the promotion of revaccination (if, indeed, it have any views at all), and whether it has seen or sees its way out of the complicated matter of the small-pox hospital question—a question, it must be remembered, for which the Board is primarily responsible, and, in view of its anomalous relations with the Metropolitan Asylums Board, continues responsible. The Local Government Board, if it has hitherto displayed a lamentable want of statesmanship, has a certain pettifogging astuteness, which is not unlikely to bring confusion upon the heads of its opponents in the House, and, by an ingenious showing of what its strictly legal functions are, prove that it has done all that the law required of it, and in a way that deserves well of the Legislature, if not of the metropolis or the country at large. We shall not be surprised if a resolution condemnatory of the Board becomes in the course of discussion a resolution wholly approbatory, and we may have to admit, despite common sense and common observation, that administratively the present state of things in the metropolis as to small-pox is the best of possible results that could have happened, in the best of governments, in this best of worlds.

As far as revaccination is affected by plenteous supplies of animal lymph, has not Mr. DODSON told us again and again in the House that he has no view of encouraging revaccination by the supply of animal lymph for the purpose, except indirectly as it may furnish a more approved (by some persons) supply of humanised lymph from fresh stocks; and has not the House accepted this statement without indication of dissent? This is the approved principle of the National Vaccine Establishment, and is it for a great Government Department to change principles as easily as gloves? But the circumstances of the present outbreak of small-pox, it may be said, call for a revision of the principle referred to. Perish the thought! It is for epidemics to adapt themselves to proved departmental rules, not for departmental rules to be modified to meet epidemic exigencies. In the one case patient, trustful routine is all that is required. In the other case the foundation of bureaucratic administration would be rendered unstable throughout, and the manner of administration would be liable to be wholly lost in attempts to secure the object for which the administration was designed—a view which, as not formally provided for by the Legislature, and inconsistent with Acts of Parliament, according to the usual rules of interpretation, must be at once repudiated.

The true source of all the infectious hospital troubles in the metropolis rests in the question having fallen into the hands of the Poor Law authorities, mainly from the negligence of the sanitary authorities in the first instance, but afterwards from the perverse action and want of courage and foresight of the Local Government Board in the second, in having determined to pursue one kind of policy in the provinces and another in the metropolis. While using every exertion to divert the charge of infectious diseases from the Poor-law authorities and fix the responsibility upon the sanitary authorities in the provinces, as a question of public health administration, precisely the opposite policy has been pursued in the metropolis. Hence the evils in respect to small-pox hospital accommodation from which we are now suffering. From the commencement of our troubles on this question to the present time the subject has been considered by the Local Government Board, above all things, as a matter of Poor-law administration, and with the result that has surely followed all meddling with sanitary or public health matters by Poor-law administrators. The administration that could not conduct the sanitary government of a workhouse has failed almost necessarily in governing the more complicated arrangements required in dealing with epidemic small-pox amidst a vast population. The Local Government Board and its metropolitan adumbration, the Asylums Board, have come to grief in their work with reference to small-pox just as the old Poor-law Board and their representatives on the different Boards of Guardians came to grief in the sanitary administration of workhouses. How does it happen that the circumstances now being brought to light as to the influence of our large small-pox hospitals upon the neighbouring populations had to be discovered by outsiders, and were not recognised, and the evils rectified as they occurred, by the officers of the Local Government Board? The subject did not concern the duties, at least legally, of the Metropolitan Asylums Board. But the Local Government Board, possessing the functions both of Central Public Health and Poor-law Authority, had full powers of inquiry. Why were these not exercised when the earliest rumours of mischief from the hospitals got afloat? But throughout the whole of the difficulties connected with this subject the Board has shown itself peculiarly careful to exclude them from consideration as a question concerning its public health administration. Indeed, what can be more astonishing and inconsistent with the question to the Central Board having presented itself as one of public health, than the fact of its having assented to the Metropolitan Asylums Board borrowing a hulk of a line-of-battle ship from the Admiralty for use as a small-pox hospital in the Thames? If there be a construction least fitted for nursing small-pox patients on board, in the interests of the patients, it is an old hulk; if there be a disease least appropriate to be treated on a hulk it is small-pox. Further, if it should prove that the accumula-

tion of small-pox in separate hospitals is apt to cause in some way or other the presence of the disease in houses situated within half-a-mile radius of the hospital, the conditions of such diffusion must be expected to be found in greater intensity in connexion with a hulk occupied by small-pox patients. Moreover, the belief that more effectual isolation will be secured in a floating hospital is, we believe, a delusion, unless special methods of guarding the ship are adopted, particularly if the hulk is to be moored, as we understand, off Deptford or Greenwich—that is to say, in the busiest part of the great highway of the river. It is difficult to believe that this matter has been submitted to the Medical Department of the Government, and that it is any more than one of those happy-go-lucky measures of the Asylums Board and Local Government Board which have so markedly characterised their doings during the present epidemic of small-pox.

FROM the earliest dawn of scientific medicine electricity, in some shape or other, has been applied to the cure of disease. The ancients, although entirely unacquainted with its principle of action, knew some of its manifestations, and attempted to turn them to account in therapeutics; but it was only with the discovery of the first condensators that the rational use of electricity began. The Leyden jar was unquestionably the starting-point of electro-therapeutics. When it became possible to administer powerful shocks by drawing sparks from a reservoir, medical men began to employ them, and remarkable effects were produced. It is true that ROLLET and DU FAY had before this time taken sparks from the isolated subject, but they had not observed the production of muscular contraction by electrical influence. DE HAEN, one of the most illustrious physicians of the eighteenth century, seems to have made an extensive trial of the new remedy. He reports numerous cures of paralysis, chorea, and other nervous affections. But one of the most remarkable advocates of medical electricity was JOHN WESLEY. Amongst the various diseases which he mentions as having been cured are: blindness, chlorosis, *hysteria*, contraction of the limbs, lameness, palsy, pain in the back, sciatica, and deafness. We find in this list most of the complaints which are really capable of deriving advantage from the action of the electric fluid as at present employed; and one of the most remarkable coincidences that may be noted in this respect is that injurious as well as favourable effects were not unfrequently observed—certain patients struck with paralysis, others contracting nervous affections; and the cases may be compared with those which under DUCHENNE'S treatment became blind whilst being galvanised for neuralgia. Some twenty years later an able and systematic advocate of electrical treatment, MAUDUIT, expressed the opinion that electricity had a most positive and beneficial influence on nutrition, circulation, and secretion. A series of papers was presented by him to the then existing scientific bodies, and attracted considerable attention. But shortly after, at the close of the last century, the discovery of galvanism, whilst giving a new impulse to the medical use of electricity, entirely superseded the methods then employed, and dethroned franklinism, as it might have been thought, for ever. Forty years later galvanism, in its turn, fell into disuse, its place being taken by faradisation, which, after long reigning supreme, gradually gave way before a partial restoration of its rival, and now static electricity, long discarded from practice, has again returned to favour. The seven forms of its application recommended by the earlier electricians are described by SIGAUD DE LA FOND as—(1) The electric bath, in which the subject, placed upon an insulating stool, is put into communication with the prime conductor, which brings the surface of the body into a state of positive or negative tension, the fluid escaping continually from the hair, fingers, and the general surface. (2) The withdrawal of sparks from the body, electrified as previously described; this consists (3) in pouring, so to say, a series of sparks by means of a special conductor upon the diseased part which it is intended to bathe in electricity. (4) Next we have electrical frictions, which consist in the passage of a metallic rod upon the body of the patient previously electrified and covered with flannel or some other insulating material. The result is said to be rapid, the superficial local irritation producing a marked degree of formication, which, according to the author, is a sovereign remedy for chilblains. (5) Then comes insufflation, the mildest method of applying static electricity, and which is performed by approaching a metallic point communicating with the source to different parts of the surface; the patient then experiences the sensation commonly known as the electric *souffle*. (6) The converse method consists in exhausting the subject's electricity by a metallic rod, which instead of communicating with the machine is connected to a chain which trails on the ground. (7) Lastly, we have the electric shock. We find in these various methods the greatest analogy with modern practices. Static electricity is at present administered by means of the electric bath, the patient being insulated and placed in communication with the prime conductor. In this condition the electric *souffle* "irritation"—the electric aigrette (exhaustion), or the removal of sparks, can easily be employed by the same means as were in use eighty years ago. The chief difference lies in the great improvements which have been introduced in the construction of apparatus, and the vast amount of electricity which can be supplied to the patient at a given moment. Under these conditions the electric shock, one of the most powerful weapons of the old system, has been laid aside as equally painful and useless. An eminent contemporary expresses the opinion that of all the sensations which can be experienced none can be more disagreeable than the commotion produced by a Leyden jar, with the exception, perhaps, of being hanged. Among the physicians who have chiefly been engaged in the revival of static electricity may be mentioned Dr. TRIPIER, Dr. ARTHUIS, and Dr. VIGOUREUX, whose experiments in the service of Professor CHARCOT have attracted considerable attention. Some account of these will be found in a recent number of the *Revue Mensuelle*. The principle advantages of this mode of treatment may be rapidly summed up under a few headings. 1. Anæsthesia: The electric bath, methodically applied with a sufficiently powerful machine during a period of twenty to thirty minutes, and repeated about three or four times a week, has a most remarkable influence upon the cure of anæsthesia. It is, of course, in hysteria that the most rapid, and, it might almost be said, miraculous cures have been effected.

No wonder, since even the application of a piece of wood, or a layer of collodion, has sufficed in certain cases to give a good result. But loss of sensibility has been repaired in far more unpromising cases, where organic injury to the nervous centres had been distinctly ascertained; and where the normal condition has not been restored, in other ways, a great improvement has been achieved in this respect. 2. Contracture, whether hysterical or of a less immaterial nature, has also been successfully treated by franklinism in our own time, as, in days gone by, the Reverend JOHN WESLEY, as we have seen, testified to the marvellous results produced by its use. 3. Chorea and nervous trembling have in various cases been radically cured by the same means. 4. Suppressed menstruation has been restored after a few sittings. 5. Hypersæsthesia and neuralgia have in some instances been relieved, in others radically cured. Our forefathers stated that hypochondria was among the diseases which might be checked by franklinism. We need not therefore be surprised to find that neurasthenia, an ailment closely allied to hypochondria, if it is not the same malady under a more recent and dignified name, has often been considerably ameliorated by the electric bath. That reverses will occur in the practice of everyone who adopts static electricity as a mode of treatment is a fact which can easily be foreseen. All that can be claimed from a positive knowledge of authentic cases is that relief will sometimes be obtained where pharmaceutical treatment had failed as completely as galvanism or faradaism in restoring health. The subject is one which deserves the attention of medical men, and which will, undoubtedly, reward the labours of all scientific observers who may choose to investigate it. Possessing, as we do, generators of a power unknown to our predecessors, better acquainted than they possibly could be with the physiological action of the electric fluid under its various forms, and rich in the accumulation of an immense store of clinical knowledge, we can easily avoid the errors formerly committed in theory, and obtain more satisfactory results in practice. At all events one thing is clear. Electricity may be applied to the treatment of disease in all its varied forms, and we should avoid an exclusive and egotistical attachment to any one method recommended by a particular authority.

AN influential meeting was held at Brighton on Tuesday, to consider the subject of Medical Reform, with reference to the education of our students in the practice of their profession. This is the third large meeting of the kind which has taken place within the past few weeks, first at Leeds, then at Bradford, and now at Brighton, so that we have had an opportunity of hearing the matured views regarding medical reform of some of the leading practitioners in the Northern and South-Eastern counties of England. So far as we can judge, the larger proportion of the profession is of opinion that the time has come for legislative interference in this matter. This opinion is not based on a mere love of agitation, but is founded on the belief that the curriculum and method by which our students become qualified to practise are defective, and that the existing licensing authorities of the United Kingdom, after ten years' effort, find themselves incapable of sinking their minor differences, and uniting to promote the common welfare of the profession. Some of the most prominent members of the medical corporations, however, still console themselves with the idea that the existing movement in favour of medical reform lacks vitality so far as the bulk of the profession is concerned, that it is something which has been created and kept alive by the editors of certain journals and a few restless individuals; but if such were the case, how is it possible, as Dr. C. HOLMAN remarked at Brighton, to account for the opinions expressed by the various gentlemen who have spoken at recent meetings on medical reform, as he argued these gentlemen are neither editors nor agitators, but some of the most influential and successful men in the profession? Beyond this, many of them employ young practitioners as assistants, and have an opportunity of forming an opinion as to the results of the present system of training students with reference to its capability of producing men who are fit for the work of their calling, and they have arrived at the conclusion, which is also entertained by the majority of the profession, that the education of medical students is unquestionably faulty, and they see no reasonable hope of improvement under existing circumstances. This is the motive power—the secret of the present movement in favour of reform. Medical men, as a rule, had no wish whatever to break away from the old corporations; they have waited patiently, and striven hard to induce our medical authorities to combine for the common good of the profession; but, weary of promises for conjoint action on the part of the corporations, they now affirm that the time has arrived for legislative action. We have endeavoured, and shall continue to strive, to give expression to the views of the profession on this subject. The meetings already held have not been promoted by us, but we, and the profession generally, are nevertheless under a deep sense of obligation to the gentlemen who have taken part in these meetings; for unless medical men come forward and speak out plainly it is difficult for us to gauge the depth of feeling that exists on the subject, and it is impossible for the members of the Royal Commission engaged on Medical Reform to arrive at a satisfactory conclusion unless the profession, through its representatives, now come to the fore and state their grievances, together with the measures they propose to overcome existing anomalies. In fact, as Dr. WITHER MOORE, the President of the meeting at Brighton, justly remarked, the Government cannot be expected to consider a matter of the kind until the profession has made up its mind what it really wants.

We confidently believe that a large majority of professional men have made up their minds and demand an alteration in the constitution of the General Medical Council. The profession assert that in their opinion the number of the Council should be reduced by one-half, that it should be endowed with the responsibility and real powers of a Council of Medical Education, and that its members should be elected by the medical practitioners of the United Kingdom. On the other hand, it is equally certain that some of the most influential men in the profession affirm their belief that a Council partly elected by the profession is not to be thought of. The reply is, What has been the outcome of the work performed in the Council by some of those gentlemen who are loudest in condemning the proposed change?

It is true, as Dr. R. BOWLES contends, that the lack of results from their deliberations is in a large measure attributable to the Medical Act of 1858, under the provisions of which the Council work. But what reason is there to suppose that the bulk of professional men throughout the country are incapable of forming an opinion regarding the qualification of individuals best fitted to perform the work required of members of the Council? These gentlemen certainly know very well whom to trust when they require an opinion on professional matters, and they may equally be trusted to elect good Councillors.

DR. LYONS, the member for Dublin, acted with perfect *bona fides*, and in a manner which must create a strong claim to the respect of his profession, in declining to present a petition which the King and Queen's College of Physicians in Ireland has seen fit to address to the House of Commons in favour of legal as opposed to medical coroners. This corporation has long held a position strangely out of sympathy with the profession on subjects of education and qualifications, and it is perhaps in harmony with the traditions of the King and Queen's College that it should run directly counter to the best interests of the profession in regard to any matter of practical concern. Its most recent exploit is the drafting of a petition asking "that every coroner should be either a barrister-at-law or on the roll of solicitors," and arguing that "while medical evidence is essential for the efficient conduct of a coroner's inquiry into the cause of death, it by no means follows that there should be a medical judge to try cases where medical evidence may form an essential portion of the case." Meanwhile the profession contends, as it has always contended, that no non-medical judge *can* weigh the skilled testimony of a pathologist. Mistakes of the kind now made by the King and Queen's College of Physicians in Ireland are the outcome of mingled ignorance and impracticability. Persons who make proposals like those embodied in this petition are obviously unacquainted with the history of the Coroner's Court, and cherish a dreamy view of its assumed dignity which is incompatible with any sound conception of the needs of the case. Coroners do not "try cases"! The *sole* purpose of an inquest is to ascertain the cause of death. It would disorganise the whole judicial system to magnify the office of coroner in such fashion as to make him a petty judge, at the foot of the administrative system. This is what the advocates for legal coroners are striving to accomplish. There is no need of such a Court as they seek to make out of the remains of the coroner's office. To investigate the causes of death in a district there must be a public official, and none can be so fit for the proper discharge of duties accruing to such an office as medical men. They alone can carry an inquiry of this nature to its legitimate issue by the most direct, efficient, and, let us say, the cheapest route. When a medical corporation goes out of its way and flagrantly oversteps the boundary line of its province to offer suggestions to Parliament, it is unaccountable that these should take the form of recommendations antagonistic to the common-sense instinct of the medical profession, and not less at variance with the intelligent opinion of the country. Dr. LYONS deserves the thanks of his brethren on both sides o St. George's Channel for the wise step he took in refusing to be the agent of a body of professional gentlemen so demented as the College of Physicians in Ireland has shown itself.

WE have recently published several letters from correspondents (some public vaccinators) complaining of the inefficiency of the vaccine lymph issued by the National Vaccine Establishment. Certain of the complainants are men too accustomed to vaccinate to permit it to be inferred for one moment that there can have been any shortcoming in the operative procedure, and in a few instances the failure in the use of the lymph has been too uniform and repeated for it to be attributed to any other cause than the want of activity in the fluid. It is unfortunate that this question should be raised at the present time, when, in the public interest generally, it is desirable that confidence should be maintained in the central lymph establishment and its issues; but at the same time it is natural, as no doubt the demands for lymph from the establishment exceed the normal proportion. We hold this subject so important that we have sought independent information with regard to it in the metropolis and elsewhere; and we find on the one hand that while not a few vaccinators who have had and have occasion for using largely lymph obtained from the National Vaccine Establishment cannot speak too highly of its character for efficiency and certainty in use, others have lost all confidence in it, and if they have occasion to procure fresh supplies of lymph do not seek them at Whitehall. From this we infer that the vaccine lymph issued from the National Vaccine Establishment is more variable in quality than should be, and that in the interests of the establishment and of vaccination generally the Local Government Board should institute some inquiry into the cause of this variability with a view to remove it, if it should be found to depend upon remediable causes. If this be not done, and that pretty quickly, and the question be suffered to slide, as the rumours about the Hampstead Hospital were allowed to slide, the Local Government Board will possibly find that while it has been sleeping others have been wide awake, and a matter which in the first instance had concerned the National Vaccine Establishment alone had developed until it had come to concern vaccination generally. It does not follow that with regard to questions to which the Local Government Board chooses to shut its eyes other persons interested in them will elect to follow the same course. The policy of the blind leading the blind can have but one result; but it may be doubted, having regard to the present state of the small-pox hospital question in the metropolis, whether the Local Government Board is yet prepared to accept this uniformity of the result. But at least it should feel assured that this is not the time to have the question of dealing with the metropolitan epidemic of small-pox complicated by doubts as to the efficiency of the lymph issued from Whitehall, nor to risk bad or imperfect vaccinations and revaccinations from the use of feeble or worthless lymph.

THE next examination for the certificates in Sanitary Science given by the University of Cambridge will commence at Cambridge on Tuesday, Oct. 4th. Any registered practitioner may present himself who is in his twenty-fourth year. Applications for admission or for information should be addressed to Professor Liveing, Cambridge.

Annotations.

"Ne quid nimis."

THE HOSPITAL SUNDAY FUND.

THE Council of the Hospital Sunday Fund met on Monday, under the auspices of the Lord Mayor, who shows the most kindly interest in the success of the Fund, and has agreed to attend officially at Westminster Abbey in the morning and at St. Paul's in the afternoon of the 19th, where Her Majesty's judges, too, have consented to attend. The Council has unanimously determined that it cannot give a grant to Surgical Appliance Provident Associations which require a multiplicity of letters in severe cases, and the public will heartily support the Council. It is wonderful that these associations do not see how strong public feeling is against their rule. The Eastbourne Convalescent Hospital having made a representation that it could not give more than ten letters for every hundred guineas granted by the Fund, and the matter having been considered by the General Purposes Committee, the Council, on the motion of Sir Sydney Waterlow, unanimously recommended a grant for this year on these terms. It is no doubt a large sum for the Council to pay, but the hospital has large expenses and deals generously with its subscribers, and through them with its patients. Dr. Glover seconded Sir Sydney's resolution, observing that whereas the question with this hospital last year was one of principle, this year it was merely one of detail, which might be left to time and the authorities of the Fund and the hospital respectively.

CONVERSAZIONE AT ST. BARTHOLOMEW'S HOSPITAL.

ON Friday last a conversazione was given by the governors and medical staff of this ancient hospital, which was attended by the Prince and Princess of Wales, and nearly 2000 guests. The school was formally opened by the Prince about eighteen months ago, but since that time has received many additions, and is now in thorough working order, and it was thought by the staff to be a good opportunity to show to the public the arrangements that have been made for the instruction of the students. The space between the quadrangle and the new buildings of the school was converted into a large reception-room, capable of holding 600 persons and more. The visitors were received by Sir Sydney H. Waterlow (the treasurer of the hospital) and his daughters, Dr. Andrew, the senior physician, Mr. Savory, the senior surgeon, and other members of the staff. From the reception-room passages led on the one side to the library, well filled with books and finely fitted up with oak panelling, to the physiological class-room and to the museum, and on the other side to the anatomical theatre, the medical theatre, the dissecting-room, and, at some distance, to the dispensary of the hospital, where the manufacture of various medicines was exhibited. The walls were everywhere lined with pictures and drawings. In the library was a remarkable piece of Japanese bronze work, and a collection of Cloisonnée enamel, lent by Sir Trevor Lawrence, as well as a series of engravings by Bartolozzi, lent by Mr. Seabright and Mr. Morris. The physiological class-room contained a large collection of physiological and electrical apparatus, with microscopes and microscopic objects of interest, lent by the leading firms in the metropolis. In the museum a potter was engaged with his wheel, and proved a special attraction, and Sir W. Muir had been kind enough to lend the series of the models of ambulances of all countries from the earliest times to the present, which is kept in Netley Hospital. The band of the Coldstream Guards played at intervals in the museum. Glee-singing by the London Vocal Union, and the performances of Sibold's string band, contributed to the amusements of the evening. Refreshments were served in the great hall, which was entered through the treasurer's house, and the walls of which were adorned with many paintings of value. The entertainment was a great success.

TRAINED NURSES FOR THE SICK POOR.

AN Association having for its object the provision of efficient nursing for the sick poor in their own homes must command the sympathy of the medical profession in a great degree, because it is in their own homes that the poorer classes chiefly need assistance. Hospital charity has its legitimate sphere, but it is not expedient that it should be allowed to encourage the poor to seek relief from the burdens of sickness by invariably flying to the hospitals. What has been urged against the cultivation of a confirmed and hereditary habit of recourse to Poor-law relief, on the smallest pretexts, may be urged with equal force and cogency against a system of hospital administration and extension which fosters a habit of sick-hospitalism. We are not, however, equally sure of the other objects which the Metropolitan and National Nursing Association proposes to itself—namely, the raising of the standard of nursing and improvement in the social position of nurses. There can, of course, be no direct objection to raising the standard of nursing, if by that the Association means rendering nurses more obedient to the will of medical men, and less disposed to trust to their assumed knowledge of "treatment," than they have recently shown themselves; but, it must be confessed, we view with suspicion all these movements. Even the Association for the Provision of Aid for the Wounded and the Injured by Street Accidents has begun to "examine" its pupils as to the measures desirable for the treatment of "emergencies," the exanthemata being included in the list! We stand in dread of elevations of the standard of quasi-medical work. They too often mean elevation to a grade at which the sort of "medical" work done by lay agency becomes ridiculous, if not positively mischievous. Excellence in nursing should consist in implicit and intelligent obedience to the injunctions of the medical man in charge of a case. Again, we have our misgivings as to the policy of making improvement in the social position of nurses an object. If nurses are proficient as skilled servants of physicians in attendance on the sick, their position *will* improve so far as it is desirable that it should do so; but it is difficult to imagine what improvement can be expected beyond that of better pay for better work. The bad old class of nurses satirised by Charles Dickens in his portraiture of "Sairey Gamp" has passed away. There is still room for improvement in the manners, and even greater scope as regards the modesty and obedience, of nurses; but we do not think this improvement is to be sought by seeking a better social position for members of the calling. Housekeepers do not find that the measures which have been taken for the social "elevation" of domestic servants have led to substantial improvement in the class of cooks and housemaids. The notion of lady-helps may be dismissed as absurd, and the class of lady nurses will not be perpetuated. Nurses must always be *servants*, and they cannot safely be permitted to rise above that position in society. The more respectable they are the better, provided always their respectability does not interfere with their obedience. The main object of this Association is commendable in the highest degree, and we wish it every success; but as regards its secondary objects we are not so well assured, and would gladly see them practically subordinated.

CONTRIBUTION TO THE STATISTICS OF MYOPIA.

DR. O. INST of Zittau in Saxony, in a note which appears in the just published *Archives of Ophthalmology*, states that he has examined the eyes of 1229 pupils of the two high schools of Zittau, the one of which was erected in 1666, the other in 1871, and in both of which the hygienic conditions of light, space, and arrangements of furniture leave nothing to be desired. The contrast between them and the dark rooms of our older schools is striking. The examinations were made in the same room, under equable artificial illumination, both with glasses and the refraction ophthmaloscope, mostly without artificial mydriasis. Only those cases were entered as myopia which showed a decided improvement of visual acuteness by concave glasses, and whose myopia was verified by the ophthalmoscope. In some instances good vision could only be obtained by the aid of a convex glass, nevertheless there was no ophthalmoscopic myopia. The well-known affection of spasm of accommodation, represents, he thinks, the transition from the hyperopic into the myopic refraction. He has met with a few cases in which repeated atropia treatment each time produced a temporary good result, but did not prevent the development of permanent myopia. The percentage of myopia in the seven classes of the new high schools was as follows:—25·7, 11·4, 22·2, 43·6, 45·0, 80·0, and 58 8, which, leaving out the accidental inordinate figures in the first year and the sixth, agrees well with the results obtained by Cohn and other observers. Myopia being as frequent in the new schools of Zittau as in other educational institutions of the same kind, we may fairly conclude that it does not chiefly result from insufficient illumination of the school-rooms, but rather from the great and ever-increasing demands on the industry of the pupils at home, forcing prolonged labour on their eyes during the evening hours, frequently by insufficient artificial light. Hence, though far from underrating the dangers of bad sanitary conditions in the school-rooms, Dr. Inst urges the necessity of sparing children's eyes the fatigue of evening work as much as possible. In regard to treatment, he thinks, with the majority of ophthalmic surgeons, that the effects of atropine are only temporary, and states that he intends to try convex glasses, a proceeding that, with Knapp, we believe is fraught with danger by aggravating the injurious habit of holding objects nearer than the position of the far point of their distinct vision requires.

THE RECENT COLLIERY ACCIDENT AT DEARHAM.

AN inquest, which had to be adjourned, was held a few days ago on the body of Robert Highmore, a miner, killed by a stone falling from the roof of the colliery. He was treated by Dr. Crerar of Maryport and his assistant for dislocation of the clavicle by bandaging and rest. There was at first extreme collapse, but after the lapse of three or four days he was progressing, in their judgment, satisfactorily, when they were dismissed to make way for Dr. Spurgin and Dr. Jackson. Dr. Spurgin's account of the man was that he was suffering from dyspnœa; respiration 80; pulse 125, feeble and weak; tongue furred; expression very anxious; eyes very brilliant; and a general state of high fever, with rusty expectoration. This was his condition a day after that on which Dr. Crerar had discontinued attendance, and on which he describes him as having nothing in his state to cause death. Dr. Crerar and his assistant both refused to give narcotics. Dr. Jackson, who saw him before Dr. Spurgin, sent four pills with half a grain of morphia in each, of which one was taken, and Dr. Spurgin injected hypodermically a quarter of a grain. The chief discussion at the inquest was as to the respective effect of different treatments by bandaging and by narcotics. We must leave this to the judgment of medical men, only observing that after such injuries bandaging and rest are most essential elements of treatment. Apart from all questions of the applicability of narcotics in such cases, we think it most important not in any case to send out morphia in half-grain doses, to be repeated every half-hour till sleep is produced. The idea that a bandage would drive a fractured rib, even if such existed, into the lung will not bear discussion, and was not seriously maintained either by Dr. Spurgin or Dr. Jackson. We can only express regret and surprise that the coroner, though occupying two days in this inquiry, did not order a post-mortem to settle differences of opinion and to give accuracy to judgments on the conduct of medical men.

ERICHSEN MEMORIAL FUND.

WE understand that at a meeting of Mr. Erichsen's old colleagues and pupils, recently held at the house of Mr. John Marshall, F.R.S., it was proposed to endeavour to obtain some permanent memorial of Mr. Erichsen's long connexion with and great services to the School of Medicine of University College. The approaching completion of his term of office as President of the Royal College of Surgeons being considered as a fitting occasion for such a monument, it was decided that steps should be taken to invite former students of University College, and others of Mr. Erichsen's friends, to contribute. The memorial is, we believe, to include a bust of the eminent surgeon, which it is proposed to place in University College. The name of Mr. Erichsen is so highly respected, and so well known in connexion with his work on surgery, not only in Great Britain and the Colonies, but also throughout Europe and the Continent of North America, that very many, we are sure, will be glad of this opportunity of contributing to a testimonial to one who has done so much for the honour of British surgery. Subscriptions to the "Erichsen Memorial Fund" may be sent either to Mr. Marcus Beck, 30, Wimpole-street, W., who has undertaken to act as honorary treasurer; or to Mr. W. A. Meredith, 14, Old Burlington-street, W., the honorary secretary. No subscription is to exceed two guineas in amount.

THE HOTELS OF ROME.

THE *Italian Times*, the English journal published in Rome, has established a Commission with a view of inquiring into the sanitary conditions of the hotels of the city, and of suggesting such improvements in them as may be found requisite. The Commission is composed of Dr. L. Aitken, Dr. Erhardt, Dr. Fiordispini, Dr. Manassei, and Dr. J. H. Thompson. The conception of this Commission has been very well received by hotel managers, to their credit be it said, and it has commenced its work with good promise of being carried to a successful issue. It is a kind of work which must exercise the best effect upon visitors, in giving them confidence that they may enter the hotels of the city without serious risk of suffering from the defects of drainage and water-supply which are so largely believed to attach to them. For it is idle to deny that the reputation of Rome as a resort for tourists has been greatly prejudiced by the fear that the sanitary arrangements of its hotels are far from what they should be. We regret to observe that the Italian Medical Association has taken umbrage at this Commission, and has summoned a meeting to discuss "the measures to be taken in view of the arbitrary interference of certain foreign medical practitioners with the hygienic condition of Roman hotels." But if neither the Municipality nor the Association has seen its way to do this in the interest of foreign visitors, the world in general will feel only too much obliged to the proprietorship of the *Italian Times* for having

had the genius for seeing a way of doing the work, and forming an agency which gives promise of its being well done, and which, moreover, meets the approval of the hotel keepers themselves.

THE APPOINTMENT OF A HOMŒOPATH AS MEDICAL OFFICER OF HEALTH AT HASTINGS.

A MEMORIAL drawn up and signed by a considerable number of influential ratepayers has been presented to the Mayor of Hastings, requesting him to convene a public meeting to protest against the recent appointment of the present medical officer of health, which was made contrary to the general wish of the inhabitants. As is well known, this gentleman is a homœopath, and the memorialists urge that the appointment is calculated to do infinite damage to the trade and prosperity of the town as a health resort, since members of the medical profession will refrain from recommending their patients to visit the town if the step that has been taken is maintained. The Mayor, though he admits the right of the inhabitants to call a public meeting, declines to do so himself, as the matter he thinks is entirely within the province of the Town Council, and any action on his part would be anomalous and unprecedented. We hope this decision on the part of the Mayor will not prevent those ratepayers who have the best interests of the town at heart from summoning a meeting, with a chairman of their own, to discuss this important subject. The material welfare of the two towns, Hastings and St. Leonards, will, as the memorialists state, suffer considerably unless the profession and the general public receive an assurance that sanitary matters are efficiently conducted. How this can be the case if the present state of matters continues we are at a loss to conceive. The duties of a health officer constantly involve questions of professional etiquette of the most delicate nature; and a gentleman who has the entire confidence of his professional brethren, and can rely on their cordial co-operation and support, is best able to carry out matters of sanitary reform, and deal promptly with difficulties in times of emergency, which would be impossible in the case of an unpopular man, to whom such support would be given grudgingly and of necessity. The competition among health resorts is now so keen that no town can afford to handicap itself unfavourably in the race by an indifference to health matters. In considering the relative advantages of health resorts having many characters in common, any suspicion of there being a hitch in the sanitary arrangements of any one of them will be sufficient to ensure a casting vote being given against it. Moreover, the ratepayers of Hastings credit the members of the medical profession with strange magnanimity if they suppose that practitioners will send patients to a town where, if attacked with any epidemic disease, they will be brought into direct contact with practitioners who hold views diametrically and irreconcilably opposed to their own.

REMOVAL OF THE KIDNEY FOR NEPHRO-LITHIASIS.

AT the Charing-cross Hospital is a lad aged fifteen, from whom Mr. Barwell removed a kidney on May 5th, and who is now convalescent. The boy had been under observation for about a year with pyelitis and retro-peritoneal abscess. An incision was made about ten months ago, with the effect of mitigating the symptoms. The wound had healed, leaving only a sinus. In April, by sounding through this passage, Mr. Barwell detected a stone. Yet although the lad was becoming very anæmic, with irregular hectic temperature, no consent for operation could be obtained until the above date, when lumbar nephrectomy was performed. Two peculiarities rendered the removal unusually difficult—viz., the dense thick cicatricial tissue and the proximity of the rib to the ileum. Mr. Barwell cut through the tissues, and came upon the kidney with the stone impacted. An endeavour to extract this latter caused copious bleeding, hence the operator rapidly enucleated the gland, and passed a ligature round the pedicle *en masse*. Since want of room forbade removing the kidney entire, it was divided and extracted in two parts. The operation was thus completed very quickly, and with scarcely any loss of blood. Since then the boy has been going on uninterruptedly well, his temperature becoming normal and regular, the wound being now nearly healed. This is, we believe, the second successful case of removal of the kidney for stone.

EMPLOYMENT FOR SOLDIERS' WIVES.

A FEW years ago, in Dublin, if we remember rightly, the important step was taken by an army medical officer of establishing a class for the instruction of soldiers' wives in the duties required of midwives. The object of the promoter of this praiseworthy measure was double—that of providing in each regiment one or more qualified nurses whose services would be available for the wives of soldiers in the colonies, where such aid is often scarcely to be procured, and of training the women for a special duty, which they might turn to profitable account both during the period of their connexion with the army and after that had ceased. Another step in this direction has just been taken by the formation of an association for the instruction of soldiers' wives in general nursing. Last week a meeting was held at Woolwich in connexion with the association, and there was no lack of distinguished patronage, Viscountess Strangford, Lord Chelmsford, Sir Frederick Roberts, and General the Hon. E. T. Gage taking part in the proceedings. Major Duncan, R.A., stated that the Field-Marshal Commanding-in-Chief took a warm interest in the question, "and had addressed a circular letter on the subject to all the commanding officers in the service, of whom three-fourths had answered favourably." The object in view is very commendable, but we doubt whether the promoters sufficiently realise the difficulties likely to be encountered. A large proportion of soldiers' wives are women who have not the qualities required in good nurses, and the selection of those who are to be trained must be a task of great difficulty. We cannot for a moment suppose that it is intended to train all the women of a regiment for such duties, and we have no indication of the manner in which, or the persons by whom, the selection is to be made. Then, again, there is the difficulty of withdrawing these women from their families. Who is to care for their children while they are engaged at the hospital? Unless the selection is made with judgment and a very careful supervision is maintained over the nurses, we fear the results will prove far from satisfactory. We are not much impressed with the sagacity shown by Lord Chelmsford in his remarks on the subject. He observed that "all the good results which had followed the arrival of Florence Nightingale and her band of nurses at Scutari were to be yet achieved in similar cases by the soldiers' wives." Is it possible that Lord Chelmsford has failed to recognise in Florence Nightingale a woman in ten thousand—ay, in a hundred thousand;—and does he really expect results from the soldiers' wives such as were obtained by that remarkable lady and her band of educated nurses? If he does, we have no hesitation in predicting failure and disappointment. And what are we to say of his anticipation of the occurrence of similar cases to those of Scutari and Balaklava? Have the military authorities profited so little by the sad experiences of those days as to justify his lordship in predicting a similar

fiasco? We sincerely trust, however, that wise counsels may prevail, and that by judicious selection and careful administration much good may be effected, even though it does not amount to anything like that foreshadowed in the speeches at the meeting.

THE COMMISSIONERS IN LUNACY AND ASYLUM REPORTS.

OUR readers will have noticed that for some years past we have avoided, as far as possible, any formal reference to the printed reports of asylums. The time has now arrived when it may be well to state the grounds of this reticence. We make no apology for speaking plainly. The facts are these. Under the system which requires or allows the Commissioners in Lunacy to write the reports of their visits to asylums in the books of these institutions, and which permits the compilers of asylum reports to reproduce these reports in their pages, the records left by the Commissioners have come to be nothing more or less than testimonials left with the authorities of asylums in return for the courtesy shown during an inspection. This is a most disastrous condition of matters, and we venture to suggest that it is one which demands the very serious consideration of the Legislature. The subject is one of the gravest practical interest to the public, and whatever else in connexion with Lunacy may be played with or postponed, this little matter at least might be promptly reformed.

THE BLOOD IN CASES OF EXTENSIVE BURNS.

THE congestion of the internal organs in cases of severe burns has long been a familiar fact to surgeons. But it has been questioned whether the marked constitutional symptoms produced by such injuries are to be entirely explained by this congestion, and by the direct influence of the burning upon the cutaneous sensory nerves, or whether part of such immediate symptoms, and also the later phenomena, may not be caused by some intimate change in the blood itself. Hoppe-Seyler has recently examined the blood of two patients extensively burnt, and he found that in one of them 2·4 per cent., and in the other 5 per cent. of the hæmoglobin had escaped into the serum, which in the latter case only corresponds to about 25 grms. of blood. The blood readily absorbed oxygen, and became of a bright-red colour, and when exhausted evolved carbonic acid gas. No notable change in the corpuscles was discernible by microscopical examination. In one case the urine contained methæmoglobin, but the quantity only represented 2·14 grms. of blood. From these results there is no evidence that destruction of blood-corpuscles plays any part in producing the general symptoms of burns.

THE METROPOLITAN PROVIDENT MEDICAL ASSOCIATION.

A CONFERENCE has been held between delegates of this Association and of the Hospital Saturday Fund. It is difficult to form an accurate estimate of the plans of the Association. Beyond the idea of a company to float fifty dispensaries in the metropolis, at which the working classes are to be attended on the very lowest terms, we are not favoured with much detail at the meetings. At any rate, such detail is not reported. We caution the promoters against thinking that they can mass the working classes together under the care of a young and untried medical man, to be paid a salary more befitting a clerk than a doctor, which is the method that seems to find favour with them. This will not prevent the members from seeking gratuitous advice at hospitals or dispensaries where men of some standing may be seen; and a scheme such as that proposed should not be encouraged by gentlemen wishing to raise the providence of working men in the extremely important matter of their health and that of their families.

THE CARDIAC CIRCULATION.

L. LANGER has been making observations on the terminations of the small veins of the heart. The minute apertures by which many of them open into the right auricle—foramina Thebesii—are familiar to all, but he has demonstrated similar openings into the left auricle, which Rockdalek had previously discovered. And further, Langer finds that in both ventricles, especially on the papillary muscles, and near the orifice of the pulmonary artery and aorta, are fine apertures smaller than the foramina Thebesii, which he proved communicated with the veins by driving air through them into the veins, and coloured fluids from the veins into the ventricles. The vessels thus opening on to the inner surface of the ventricles are very small, and not the direct branches of the great cardiac veins, and they seem to be devoid of valves. These minute vessels probably serve a useful purpose in equalising the circulation in the heart-substance under its varied conditions.

THE RECORDER AND FALSE STATEMENTS TO REGISTRARS.

THE Recorder, Sir Thomas Chambers, made, the other day, some very curious remarks in reference to the case of a woman named Hyde, who was charged before him with giving a false address of the place of birth of her child in order to avoid having it vaccinated. The woman creditably admitted the offence, her excuse being that a child previously had died, whose death *she attributed* to vaccination. Thereupon the Recorder made the observations which have excited our surprise. He said the whole medical profession were in controversy about the matter—of vaccination, we presume. But what had that to do with the offence of a false statement under the Registration Acts? And even if it had been pertinent it was as inaccurate as anything could be, for there is no one point on which the medical profession is so near unanimity as that of the efficacy of vaccination and revaccination.

ARMY COFFEE TAVERNS.

WE observe with much satisfaction that a coffee tavern for the men of the Guards has just been opened in Buckingham-palace-road, near the Victoria Station. It is intended to be kept open from 5 A.M. till 12 at night, and in addition to providing food and non-alcoholic drinks at very moderate prices, will be amply supplied with newspapers, and rooms will be set apart for reading, writing, bagatelle, &c. It is proposed hereafter to add a library. We wish every success to this laudable endeavour to provide rational amusements for the men of the Guards, and to afford them comfortable accommodation and enjoyment free from the temptation to intemperance which is so abundantly spread before them in the form of magnificent gin palaces.

VARIX OF THE ŒSOPHAGUS.

AMONG the extremely rare positions in which varicose veins may be found is the mucous lining of the œsophagus. An example was exhibited at the Pathological Society by Dr. Bristowe in 1856, in which "the veins of the mucous membrane were found to be enlarged and tortuous, especially in the lower part, having all the characters of varicose veins of the lower extremities." Death was caused by hæmorrhage from the perforation of one of these dilated veins. C. J. Eberth records a closely similar case in *Deutsches*

Archiv f. Klin. Med. A man forty years of age had suffered for four years from hæmatemesis and bloody or tarry stools, and this had been repeated eight times within a year of his death. As there was pain over the region of the stomach, the symptoms were thought to depend upon an ulcer of the stomach. At last a fatal hæmorrhage occurred, and it was then found that the veins of the mucous membrane were varicose over the lower half of the œsophagus, and that, reaching the size of pencils, they projected as soft cords from the surface. The hæmorrhage was traced to an opening in one of these veins, about two centimetres above the cardiac orifice. Several minute white cicatrices were also found along the greater curvature of the stomach.

THE ELECTIONS AT THE ROYAL COLLEGE OF SURGEONS.

THE annual election of Members of Council of the Royal College of Surgeons of England is fixed for Thursday, July 7th. The retiring members are Sir James Paget, Mr. Haynes Walton, and Mr. Wheelhouse of Leeds. The two former gentlemen are expected to offer themselves for re-election; but Mr. Wheelhouse, it is said, will not again seek the suffrages of the Fellows. The following Fellows will be candidates:—Mr. Hulke (1857), Mr. John Croft (1859), Mr. Christopher Heath (1860), and Mr. Reginald Harrison (1866). As the announcement of the day of election appears in the *London Gazette* to-day (Friday), other candidates may be forthcoming, among whom many would be glad to find Mr. George Pollock (1846).

THE STARVATION FOLLY.

AGAIN the American community are to be scandalised by an attempt to fast, this time for forty-five days. Granted the feat is possible, what then? It is a disgrace to the medical profession in the United States that men should be found willing to lend themselves to the grim farce by "watching" it. We are not forgetful of the unhappy fact that the profession in England is discredited by a folly almost amounting to wickedness of the same class. Some years have, however, elapsed since the occurrence of this English scandal, and we may hope our brethren at home have learnt wisdom. We only notice the matter to denounce the whole business. It is useless and mischievous. The procedure is a folly verging on madness, and ought to be so regarded and discountenanced.

A NOVEL and interesting method of adding to the funds of the Chelsea Hospital for Women has been proposed in the shape of a grand fancy fair and musical fête, to be held on June 8th, 9th, and 10th, in the Royal Albert Hall, which will be converted for the occasion into an old English market-place. All the accessories of the fair will be in the old English style, and the device, having been accorded the patronage of Royalty and of a large number of the aristocracy, may be expected to prove a gratifying success.

THE Medical Acts Commission met at 2, Victoria-street, Westminster, on Friday, the 27th, Saturday, the 28th, and Monday, the 30th May. The evidence of Dr. Acland, Sir James Paget, and Mr. Erichsen was taken. There were present: The Earl of Camperdown (Chairman), the Right Hon. W. H. F. Cogan, the Master of the Rolls, Sir William Jenner, Mr. Simon, C.B., Professor Huxley, Dr. McDonnell, Professor Turner, Mr. Bryce, M.P.; and Mr. John White, Secretary.

MR. J. K. BARTON will be elected Vice-President of the Royal College of Surgeons in Ireland on Monday next, the 6th inst.

IT is always pleasant to report the progress of the Coffee Tavern movement. A few days ago the Earl of Onslow opened the Royal Army Coffee Tavern, Stoke, which is a handsome building of three stories, replete with conveniences including stables. The success of this undertaking is much due to the rector of Stoke. But the Earl of Onslow is to be thanked for laying the foundation stone, and for opening the tavern in a speech showing his sympathy with coffee taverns as a means of opposing intemperance.

WE are glad to see that on the recommendation of the Indian Government the Companionship of the Order of the Indian Empire has been conferred on each of the undermentioned officers of the Royal and Indian Medical Services:—Deputy Surgeon-General Norman Chevers, Surgeons-Major Waring, Moorhead, Oliver Barnett, J. Anderson, and Surgeon Owen.

THE Companionship of St. Michael and St. George has been bestowed on Halliday Macartney, M.D., English Secretary to the Chinese Legation.

MR. A. O. M'KELLAR has been elected president, and Dr. M. Long hon. treasurer, of the Queen's University Graduates' Association.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORT OF MEDICAL INSPECTOR OF THE LOCAL GOVERNMENT BOARD.

The Isle of Wight.—Hitherto the Isle of Wight has had to be regarded chiefly from the climatic advantages it derives from its geographical position and from its topographical beauties. Now we are called upon to regard it from the more intimate consideration of its sanitary condition. The Local Government Board has thought it desirable to submit the sanitary administration and condition of the island to a close inquiry, and the result is now before us in the form of a report by Dr. Ballard, one of its most experienced medical inspectors. The contents of this report will, we apprehend, be a matter of painful surprise to tourists, health-seekers, and medical men, in general. It shows that the best interests of the island have been, and continue to be, sacrificed to an incoherent and negligent sanitary administration. It would appear that the sanitary interests of the island are confided to the care of nine separate sanitary authorities, eight of these having charge of the more important urban districts, and the ninth being the authority for the rural district—this district including 86,876 acres of the 93,341 acres which constitute the total area of the island, and about half the total population, the remaining 5465 acres being under the control of the urban sanitary authorities. These several authorities act quite independently of each other, recognise no common interest, display different degrees of activity in the pursuit of their functions, and, in the case of the most extensive district (the rural), the authority even goes out of its way to frustrate the very aim of its existence by an appointment of officers—to wit, nine medical officers of health and four inspectors of nuisance—without any provision for coördinate action, an arrangement which, as might have been anticipated, is fatal to the proper performance of the duties of these officers and to the proper sanitary administration of the district. It is not surprising, therefore, to find that the sanitary condition of the island as a whole, and in view of the great reputation it enjoys among tourists and health-seekers, has been lost sight of in the local interests which concern the several sanitary administrations, and that these again have been dealt with from a contracted point of view, which has been in the highest degree prejudicial to efficient sanitary work. Dr. Ballard, in describing the sanitary state of the various local administrative districts

in the island, has to show everywhere serious defects of sewerage or drainage, or water-supply, or of all these matters, with a general prevalence of enteric fever, and in some localities phthisis, which for the future must be seriously considered by visitors, at least, to the island. Writing of West Cowes, Dr. Ballard says: "I gather from the reports of the medical officer of health, and from the conversations I have had with him and with other medical gentlemen practising in Cowes, that for some years past enteric fever has largely prevailed there, not only in the lowest and the poorest part, where the district is (as mentioned before) liable to be flooded from time to time, but in other parts of the town also, and even in the new streets at the highest elevations. No parts of the town and no class of houses appear to have been spared, and visitors who have come there for health have carried away the contagion with them to their homes elsewhere." It is impossible to peruse the report without inferring that this remark is applicable to every part of the island, rural as well as urban. The account given of the pollution of one of the sources of the public water-supply of Sandown is revolting. The sanitary administration of St. Helen's, although lax in several respects, alone seems to deserve a word of approval from Dr. Ballard. No portions of the island appear in less favourable light than Ventnor and the rural district. The reader of this report will be chiefly struck by the evidences of indifference which it furnishes on the part of the sanitary authorities to the intimate sanitary interests of the inhabitants, and of the numerous visitors who flock to the island every year. The only safety from the domestic conditions mischievous to health described by Dr. Ballard, to which visitors are exposed, must rest with the sanitary authorities. If these neglect their duties, or negligently perform them, as they have obviously done, confidence in the island as a health-resort must be eventually destroyed. For people will soon learn to avoid a place where the good to be obtained from a beautiful climate is so very apt to be annulled by bad drainage and sewerage, and a polluted water-supply. Let us hope, however, that this report from Dr. Ballard will arouse the people of the island and the sanitary authorities to a proper sense of the precarious position in which the health-restoring qualities of the island stand, and that we shall presently learn that a more active and intelligent sanitary administration throughout the island has begun. It is painful to find that the most beautiful spot perhaps under British skies should, from lack of foresight of its local authorities, have become reduced in respect to many of the domestic conditions of unwholesome living to a condition which would be discreditable to localities that make no pretensions to be health-resorts.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Middlesex and Hertfordshire Combined Sanitary Districts.—Dr. C. E. Saunders reports a progressive improvement in the health of the combined districts under his supervision, and, as usual, offers much thoughtful advice for the consideration of the sanitary authorities. The death-rate of the combined district, which was 18·6 for the three years 1874–6 inclusive, had fallen to 16·2 for the four years 1877–80. The most noticeable feature in the returns of causes of death was the fatality from summer diarrhœa. Dr. Saunders attributes this to the influence of high temperature, a deficiency of rainfall, and to "filth," exemplified in what he terms, as he tells us "advisedly," "the beastly habits of the people," and the foulness of some, at least, of their surroundings. "It is," he observes, "the influence which filth, in its commonest forms, has on the atmosphere, that it is my greatest desire to see more fully recognised; hence it is with disappointment that I still have to report that so little has been done towards clearing off that abomination—the open privy; and I venture again to ask sanitary authorities to lose no opportunity of enforcing the earth-closet system, which, however badly it may be constructed or kept, and however far it may fall short of what an earth-closet can effect in deodorising excreta, yet in its worst form is incomparably better than the open privy." Dr. Saunders gives some interesting illustrations of the scattering of infectious diseases from the metropolis into the suburban districts, and, equally interesting, of the facility with which such scattering may be prevented from doing mischief if the means of isolation are available.

Withington, Urban (Lancashire).—Dr. Railton reports for this district in 1880, among a population estimated at 15,000, a birth-rate of 26·4 per 1000 persons living, and a death-rate of 13·7. Dr. Railton gives careful attention to an exposition of the true principles of house-drainage, illustrating his observations with a diagram; and his remarks deserve the closest attention of the householders in his district.

Glanford Brigg, Rural (Lincolnshire).—Mr. James Burdett Moxon reports for 1880 a death-rate of 18·0 per 1000 persons living amongst a population estimated at 29,199. Mr. Moxon's experience of typhoid fever in this district has been such as to confirm, in his opinion, the views of those medical men who believe that the malady is capable of being disseminated by infectious emanations from the sick, and he would enforce the necessity of isolation and the use of disinfectants, as well as means for securing freedom from polluted water, imperfect drains, accumulations of filth, &c. The chief feature of the health history of the year was an excessive infantile mortality. This mortality Mr. Moxon attributes mainly to the imperfect manner in which children are protected from the cold and wet of our climate, and the mode (improper) in which they are nourished, particularly the absence or deficiency of milk in their diet. The difficulty of obtaining milk in parts of his district seems to be great, and he suggests that some of the leading inhabitants should organise measures for the sale of this essential article of diet.

Hexham, Rural (Northumberland).—Dr. M'Grigor Maclagan, in his carefully prepared and thoughtful report for 1880, returns a birth-rate of 31·9 per 1000 of the estimated population, and a death-rate of 19·020, being a considerable increase upon the death-rate (17·114) of the previous year. He describes the state of the district with reference to water-supply, drainage, privy accommodation, and dwellings, and shows that while much has been done to amend these matters since the formation of the district, especially as regards privy accommodation, much remains to be done. No special incidence of any of the principal zymotic diseases has to be recorded, but Dr. Maclagan offers some observations upon the difficulty of controlling the spread of infection from the free intercourse maintained among families; and he refers also to one of the notable modes of dissemination of infection in the districts as being determined "by persons who go from house to house selling articles for domestic use, linen and woollen cloth, which is displayed to, and examined by, persons who have been in direct communication with infectious disease, which, after much inspection and handling, is again rolled up and carried to some neighbouring house." He makes the following observations on the same subject:—"Schools, again, have frequently proved the media through which infectious disease has been propagated in the district. Children themselves, recovering from infectious disease, or coming from houses in which disease exists, convey contagion to their schoolmates; and to prevent a further increase of disease in this manner, the closing of schools has been advocated. This is a point, however, which should be left to the discretion of the medical officer, as there can be no doubt that under certain circumstances a greater danger exists of favouring the increase of disease by closing a school than otherwise. When a school composed of children from one village, or who live closely together, is closed, the natural consequence ensues that they are continually invading each other's houses, and thus are brought into closer proximity to disease than when attending school; on the other hand, if a school consists of children from cottages in a sparsely populated and scattered district, some benefit might be derived from its closure."

Maidstone, Urban (Kent).—Mr. Algernon Adams reports for 1880 a birth-rate of 31·34, and a death-rate of 18·83 per 1000 population. The healthiness of the district was even greater in 1880 than it was in 1879, although the last-named year is said to have been "remarkably healthy." The utility of the sanitary hospital (although by no means one to be highly commended) was made strikingly manifest in enabling the medical officer to effectually check small-pox in each of four several invasions of that disease. Diarrhœa was the most fatal zymotic disease during the year. Mr. Adams made minute inquiry into the circumstances attending every case of death from the disease, and the conclusions he arrived at were as follows:—"That putrescent changes and improper food are the chief factors in the production of this disease, the changes being set up by high temperature and the miasma which abound in urban districts in the summer season. Starch foods and Swiss milk are bad substitutes for breast milk; experiment and observation have demonstrated that during hot weather putrescent changes are most prone to occur in farinaceous foods, after them in Swiss milk, less so in cow's

milk, and least of all in breast milk. When we consider how careless the poor are in cleansing the feeding bottles so universally used it almost amounts to a practical certainty that these deaths from infantile diarrhœa are chiefly due to fermentative and putrescent changes in the improper foods administered. These conclusions lead us to rely for a reduction of infant mortality upon the beneficial results which we may hope to flow from a dissemination of the knowledge that hand-nursing is a dangerous proceeding, especially in the hot season; when, however, hand-feeding is unavoidable the purest and best cow's milk, to the entire avoidance of farinaceous substances, administered by the spoon or scrupulously clean bottles is the only tolerably safe proceeding." Writing of the sanitary condition of Maidstone, Mr. Adams describes improvement in several important respects, but is reserved on the quality of the water-supply, which he says is only "fairly good," and speaks of the hospital accommodation as "dangerously inadequate," a term which indicates that it could have been used with good effect far more largely than it has been had there been more of it and it had been better situated. An interesting separate report on the sewerage of Maidstone accompanies the annual report, also an instructive popular pocket memorandum relating to infectious zymotic diseases.

THE DISPOSAL OF REFUSE.

Few questions have given, and still give, so much trouble to local authorities as the disposal of the house refuse and refuse matters which accumulate among communities. Even when this refuse does not include, as is the case in many localities, excremental matters, and is limited for the most part, as in London, to the contents of ash-bins and market refuse, the difficulty of disposing of it without the creation of nuisance has hitherto been insuperable. And this disposal has to be conducted under circumstances which truly form a stigma upon our civilisation. The local authorities of the metropolis have proved singularly indifferent to the evils arising out of the manner in which the metropolitan refuse has at present to be disposed of, and the ratepayers have had to submit to a chronic poisoning from their dust-holes, which has often provoked the most earnest protests, but with little effect. Of late years there have been certain sickly signs on the part of the local authorities of an awakening sense of the evils to which the inhabitants have been and are subjected from this source, and the most important indication of this awakening must be taken to be the action of the Commissioners of Sewers of the City of London on the subject. They not long ago appointed a committee with certain of their officers to visit sundry northern towns where it was reported some fuller light was being obtained on the question of disposal of refuse, and a report of these proceedings is now before us from the pen of their medical officer of health, Dr. Sedgwick Saunders, which we would fain hope will mark the beginning of a new era in refuse disposal in London. The report is entitled "Some New Methods of Disposing of all kinds of Refuse by Cremation," and it gives a careful account of the disposal of the refuse of communities by fire as practised in several northern towns. "The system alluded to involves two propositions," says Dr. Sedgwick Saunders—"viz.: (1) The destruction by fire of everything combustible in house and trade refuse. 2. The separation of the vegetable from the animal and mineral matters, and its conversion into charcoal." The committee have returned to London wholly in favour of this system; and Dr. Sedgwick Saunders so fully agrees with them that even thus early he contributes to the means for carrying it into effect a design for "a carcase crusher or devil," so that his name will probably in future be intimately associated with the machinery by which the system will be fully carried out. This report of Dr. Sedgwick Saunders is certainly the most important contribution to the literature of the subject that we have yet had. It is admirably illustrated by plans of the "destructors" and "carbonisers," as the furnaces employed are termed, and which owe their origin to the inventive faculty and mechanical genius of Mr. Alfred Fryer of Nottingham. Contrasted with the system of disposal now in operation in the City (of which Dr. Sedgwick Saunders gives a graphic account) it seems almost inevitable, even if the question of decency among a civilised community were alone considered, that the system of cremation must be adopted by the Commissioners of Sewers. If this be done, we have little doubt that an example will be set which other sanitary authorities will be morally compelled to follow, and the metropolis at last relieved from the most disgraceful blot on its sanitary administration. To this good end Dr. Sedgwick Saunders' report is a contribution of the highest importance.

The Sanitary Committee of the Marylebone Vestry congratulates itself in having secured land, *within six miles of the parish*, as a site for a small-pox hospital. This is a curious comment on Dr. Richardson's proposition, that parishes will willingly receive their own sick within their bounds, but object to the sick from other parishes being imposed upon them. The small-pox tent hospital for St. Pancras, which has been opened in the parish of Finchley, as far away from the parish for the use of which it is intended as it is proposed to take the Marylebone hospital, appears to have been fairly used, notwithstanding its distance. Fifty small-pox cases had been admitted up to the 20th ult., and 45 patients were then in the tents.

A proposition to convert the City of London Workhouse at Holloway into a small-pox hospital has given rise to a perfect storm of local opposition. Deputations from the locality have waited both upon the Metropolitan Asylums Board and the Local Government Board to protest against the proposition, and the deputation to the Local Government Board, it is reported, urged that instead of utilising the workhouse, which is situated in the midst of a populous neighbourhood, for the purpose in question, a temporary structure should be erected on some land at Finchley, which is at the disposal of the authorities.

The extraordinary rumour that arose in some parts of the Black Country a short time ago, that three American black doctors were about to visit the Board Schools and forcibly vaccinate the children, has extended to parts of Derbyshire and Yorkshire, and caused as much trouble from the excited mothers as it caused at Dudley and Cosely. At Stonebroom, in Derbyshire, the school was stormed by the mothers of the children, and the teachers were compelled to close it.

We are glad to observe that the Commissioners of Sewers of the City of London are giving attention to the subject of erecting public conveniences for both sexes. The metropolis is scandalously provided in this respect, to the unimaginable misery of numerous persons.

The Warminster Local Board have instructed their Sewerage Committee to form an estimate of the cost of carrying out the scheme recommended by them, and the Central Board is to be asked to sanction the loan necessary to put the drainage into an efficient condition.

A curious case of vaccination by more than twenty punctures is reported from Bridgewater, of which the explanation is not yet forthcoming.

The Birmingham guardians have resolved to employ twenty men to search out all unvaccinated children in the town.

Scarlet fever of a virulent type is reported to be raging at Leicester, and making increasingly extensive demands on the resources of the fever hospital of the town.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

English urban mortality showed a slight further decline last week. In twenty of the largest English towns, the Registrar-General estimates, on the basis of the numbers enumerated on 4th April last, that 7,608,774 persons will be living in the middle of this year; in those towns 5154 births and 2912 deaths were registered last week. The births were 32, and the deaths 345, below the average weekly numbers during 1880. The annual rate of mortality in the twenty towns, which had been equal to 20·3 and 20·8 in the two preceding weeks, declined last week to 20·0. The lowest rates in the twenty towns last week were 13·9 in Plymouth, 16·9 in Brighton, 17·1 in Bristol, 17·2 in Wolverhampton, and 17·5 in Hull. The rates in the other towns ranged upwards to 22·3 in Manchester, 22·5 in Sheffield, 22·8 in Oldham, and 24·2 in Liverpool. During the first eight weeks of the current quarter the death-rate in the twenty

towns averaged 21·2 per 1000, against 23·3, the average rate in the corresponding periods of the five years 1876–80.

The deaths referred to the principal zymotic diseases in the twenty towns, which had been 396 and 424 in the two previous weeks, further rose to 452 last week; these included 125 from measles, 94 from small-pox, 84 from whooping-cough, 68 from scarlet fever, 42 from fever (principally enteric), 27 from diarrhœa, and 12 from diphtheria. The annual death-rate from these principal zymotic diseases averaged 3·1 per 1000 in the twenty towns, and ranged from 0·0 and 0·7 in Wolverhampton and Plymouth, to 3·5 in Bristol, and 3·8 in London, Liverpool, and Leicester. Measles showed the largest proportional fatality in Liverpool, Bristol, and Sheffield; and scarlet fever in Leicester, Hull, and Bristol. Fever (principally enteric) showed increased fatality in the twenty towns, and caused the highest death-rate in Liverpool. Of the 12 deaths referred to diphtheria 8 occurred in London. Small-pox caused 100 more deaths in London and its outer ring of suburban districts, and 1 each in Brighton and Norwich; no fatal case of this disease was recorded in any of the seventeen other large provincial towns. The number of small-pox patients in the Metropolitan Asylum Hospitals, which had increased from 942 to 1390 during the three preceding weeks, further rose to 1552 on Saturday last; of these 538 were accommodated in the tents for convalescents at Darenth. The new cases admitted to these hospitals, which had been 379 and 346 in the two previous weeks, rose to 402 last week. The Highgate Small-pox Hospital contained 84 patients on Saturday last, and 20 new cases were admitted during the week.

The deaths referred to diseases of the respiratory organs in London, which had been 254 and 256 in the two preceding weeks, declined to 241 last week, and were 16 below the corrected average number in the corresponding week of the last ten years; they included 138 from bronchitis and 80 from pneumonia. The annual death-rate from lung diseases, exclusive of phthisis, was equal to 3·3 per 1000 in London last week; while the rate from the same diseases was 5·6 in Liverpool and 4·1 in Salford.

The causes of 70, or 2·4 per cent., of the deaths in the twenty towns last week were not certified either by a registered medical practitioner or by a coroner. The proportion of uncertified deaths in London did not exceed 1·6 per cent., whereas it averaged 3·2 in the nineteen provincial towns. No uncertified deaths were registered last week in Brighton; Portsmouth, Plymouth, Leicester, or Nottingham; whereas the proportions of such deaths were highest in Oldham, Leeds, Hull, and Sunderland.

HEALTH OF SCOTCH TOWNS.

In eight of the largest Scotch towns, having an estimated population of rather more than a million and a half of persons, the annual death-rate last week was equal to 18·4 per 1000, showing a further decline from 21·4, 20·6, and 19·9, the rates prevailing in the three preceding weeks; this rate was 1·6 below the average last week in the aggregate of the twenty large English towns. The rates in these eight Scotch towns ranged from 11·4 and 16·5 in Dundee and Greenock, to 24·4 and 29·2 in Paisley and Perth. The Registrar-General of Scotland has not yet revised his estimates of population in accordance with the recently-enumerated numbers; it is pointed out, however, that the calculated death-rate in Paisley is probably over-stated through an under-estimate of its present population. The deaths referred to the principal zymotic diseases in the eight towns, which had been 82 and 61 in the two preceding weeks, rose to 72 last week; they included 19 from whooping-cough, 18 from diarrhœa, 13 from measles, 11 from scarlet fever, 7 from "fever," 4 from diphtheria, and not one from small-pox. The annual death-rate from these zymotic diseases averaged 2·8 per 1000 in the eight towns, and was 0·3 below the average rate from the same diseases in the twenty large English towns. This zymotic rate ranged in the eight Scotch towns from 0·6 and 1·3 in Greenock and Dundee, to 3·9 and 4·3 in Perth and Leith. The 19 fatal cases of whooping-cough in the eight towns showed an increase of 3 upon those returned in the previous week, and included 10 in Glasgow, 4 in Edinburgh, 2 in Aberdeen, and 2 in Paisley. The 18 deaths from diarrhœa also reached the number in the previous week, and included 10 in Glasgow and 3 in Dundee; the fatality of diarrhœa was proportionally more than three times greater last week in the Scotch than in the English towns. The 13 deaths from measles reached the numbers in recent weeks; 9 were returned in Glasgow and 4 in Aberdeen. The fatal cases of scarlet fever, which had been 12 and 5 in the two previous weeks, rose again to 11 last week, of which 5 occurred in Glasgow, 4 in Edinburgh, and 2 in Leith. The 7 deaths referred to "fever" (including typhus, enteric, and simple continued) rose within one of the number in the previous week, and included 3 in Glasgow and 2 in Edinburgh. The annual death-rate from this cause in the eight towns was equal to 0·28 per 1000, and was somewhat below the average fever rate in the twenty English towns. The deaths attributed to acute diseases of the lungs (bronchitis, pneumonia, and pleurisy) in the eight towns, which had been 140, 111, and 96 in the three preceding weeks, further declined to 89 last week, and were equal to an annual rate of 3·5 per 1000; the rate from the same diseases in London did not exceed 3·0.

HEALTH OF DUBLIN.

The rate of mortality showed a further decline in Dublin last week. The annual death-rate in the city, which had been equal to 29·9 and 25·2 in the two preceding weeks, further declined to 24·9 last week; this rate was lower than that recorded in any week since September, 1879. The 159 deaths in Dublin last week showed a further decline of 2 from recent weekly numbers, and included 13, or rather more than 8 per cent., that were referred to the principal zymotic diseases, against 14 in each of the two previous weeks. The 13 deaths from these zymotic diseases included 9 from fever (typhus, enteric, or simple), 2 from scarlet fever, 2 from whooping-cough, and not one either from small-pox, measles, diphtheria, or diarrhœa. The annual death-rate from these zymotic diseases was equal to 2·0 per 1000, while the rate from the same causes was 3·8 in London and 2·7 in Edinburgh. The deaths referred to fever in Dublin, which had been 3, 8, and 7 in the three preceding weeks, rose to 9 last week, and were equal to an annual rate nearly five times as high as the average rate from the same cause in the twenty large English towns. The 2 deaths from whooping-cough corresponded with the number in the previous week, while the 2 fatal cases of scarlet fever showed an increase. The deaths of infants were more numerous than in either of the two previous weeks. Seven inquest cases and 8 deaths from violence were registered during the week.

THE RECENT CENSUS IN THE LARGEST ENGLISH TOWNS.

In his last weekly return the Registrar-General published new estimates of the present population of twenty of the largest English towns, based upon the actual numbers enumerated on the 4th of April last. These new estimates have been substituted for the estimates that had been in use since the beginning of the year, which were calculated on the hypothesis that the rates of increase that prevailed during the ten years 1861–71 would be maintained during the decade just ended. These new estimates of population have a two-fold interest—they not only afford the means of comparing the growth of the several towns during the past ten years, but supply a basis for the calculation of trustworthy vital statistics. The hypothetical estimate of the population of the twenty towns was 7,616,417, and was within eight thousand of the new estimate, based upon the recently enumerated numbers. The rate of increase in the aggregate of the twenty towns has been almost identical in the last two decades. In many of the towns, however, very wide differences occur between the two estimates, based respectively on theory and enumeration. The population of registration London is now fixed at 3,814,571 persons, which exceeds by more than a hundred thousand the estimate hitherto in use. This under-estimate of the London population has had the effect of somewhat over-stating its recent rates of mortality, and is due to the fact that the London population has increased at a greater rate during the last than in the preceding decade. The increase of the population of London during the last ten years, by excess of births over deaths, and by aggregation, has been considerably more than half a million of persons; this increase is indeed more than equal to the population of Liverpool, which is the second largest English town. The aggregate population of the nineteen provincial towns is almost identical with that of the metropolis, but as the mean rate of

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increase in these towns during the past ten years shows a decline from that which prevailed in the preceding decade, the population was over-estimated by more than a hundred thousand. The population of Liverpool is estimated at 552,425, and that of Birmingham at 400,757. Manchester and Leeds are the only other towns with populations exceeding 300,000, while the next largest towns are Sheffield and Bristol, which have populations between two and three hundred thousand. No less than ten of the other towns have populations exceeding a hundred thousand; while the population of the three remaining towns was below that amount. Manchester alone among the twenty towns showed a decline of population (of nearly ten thousand) during the ten years 1871–81. The rate of increase in the other towns ranged from 9·2 and 9·3 per cent. in Plymouth and Norwich, to 28·5 in Leicester, 34·2 in Nottingham, and 41·2 in Salford. Norwich, Birmingham, Nottingham, Liverpool, Salford, and Hull, like London, increased at a greater rate between 1871 and 1881 than in the previous decade. The estimate of the populations of these towns hitherto in use has therefore been somewhat too low, and recent death-rates have been overstated. In the thirteen other towns, however, the rates of increase in the last decade have been lower than in the previous ten years; the estimates of their populations recently in use have therefore been too high, and the death-rates have, as a matter of course, been understated. This understatement of the annual rate of mortality has been largest in Leicester, Sheffield, Salford, and Bradford, and was nearly equal to 2 per 1000 in each of these towns.

HEALTH STATISTICS OF MADEIRA.

An interesting and favourable report on the health and sanitary condition of Madeira during 1880 has recently been published by Dr. Julius Goldschmidt, a medical practitioner of long-standing in the island. The population of the whole island is reported to be 130,473, of which 39,000 reside in the town and suburbs of Funchal. The annual death-rate for the whole island does not exceed 20, and for Funchal 24·4, per 1000. The island is remarkably free from epidemic diseases; and scarlet fever, diphtheria, measles, and whooping-cough are said to be seldom fatal. About six years ago, however, a severe epidemic of small-pox prevailed, which caused about 1000 deaths, which is the less surprising as we are told that there is a general prejudice against vaccination. An excessive fatality from heart disease is attributed to the steepness of the roads, and to the heavy burdens usually carried up and down the hills by the labourers. Considering the general equableness of the temperature, acute diseases of the lungs show considerable fatality; this, however, principally occurs among those living in mountain districts, who in their daily journeys up and down the mountains are exposed to extreme changes of temperature. The population seems to enjoy a remarkable immunity from phthisis, although the social condition of the poorer classes would predispose them to this disease. The foreign residents of the island, who for the most part live under favourable social conditions, are mainly descended from phthisical parents, and yet only one death from consumption is reported to have occurred among this population during the last fifteen years. Entozoa are remarkably prevalent among children, and a considerable number of deaths are referred to the indefinite cause, "febris verminosa." Leprosy too, which is said to have been introduced to the island by the first settlers, still prevails in its southern and western parts; it is estimated that between 400 and 500 persons in the island are affected by this disease, and a special hospital usually contains from seven to fifteen patients. Except for those living in defiance of the simplest hygienic laws, it is evident that Madeira must be classed among the healthiest spots in the world.

THE IRISH CENSUS OF 1881.

Although the alterations in the populations of the Irish towns as compared with the Census of 1871 are not yet accurately known; yet it has been ascertained that in Dublin, Belfast, Londonderry, Newry, and Dundalk the population has increased, and therefore the birth- and death-rates are overstated when calculated according to the returns of 1871. On the other hand, it appears that a decrease has taken place in the populations of Limerick, Waterford, Drogheda, Galway, Clonmel, and some other towns in Ireland.

THE SERVICES.

HEALTH OF OUR TROOPS AT THE GOLD COAST.

A good deal of sickness is reported to exist amongst the troops lately assembled at Cape Coast Castle in view of threatened hostilities with the King of Ashantee. The garrison has been increased by the 2nd West India Regiment from Jamaica, and detachments of the 1st West India Regiment from Sierra Leone; the barrack accommodation at the castle being very limited, the men are distributed in hired houses in the town and in tents, and it is among the former that fevers, dysentery, and diarrhœa are prevalent to a considerable extent. The sickly season at the Gold Coast is close at hand, and we understand Sir Samuel Rowe is anxious to reduce the force to the smallest limits compatible with the existing unsettled state of things in the Colony. The officers are suffering from fever equally with the men, one officer having died, and several having been invalided since the expedition arrived on the Coast.

The death is announced at Queenstown, Ireland, of Surgeon-Major Walter Blake, Army Medical Department. Mr. Blake obtained his commission as an assistant-surgeon in 1854, and was promoted to the rank of surgeon-major in Sept., 1876. His death was due to pneumonia and bronchitis.

The death is reported of Surgeon John Coghlan, late of H.M. 86th Regiment, at Kingstown, on the 28th ult. Deceased was, it is alleged, the oldest medical officer in the service, having recently completed his ninetieth year. He served during the Peninsular War, and retired on half-pay in 1844.

It is stated in the *Broad Arrow* that a fresh inquiry into the cause of the death of Brigade-Surgeon Lundy at Allahabad has been ordered, an analysis having shown that the deceased did not commit suicide by taking poison, as the verdict at the inquest declared.

Deputy Surgeon-General W. J. Moore has been appointed to act as Surgeon-General with the Government of Bombay during the absence of Surgeon-General Beatty, on leave in England.

Surgeon George Stockwell, M.D., has resigned his Commission in the 2nd West Riding of Yorkshire Corps of Artillery Volunteers.

ADMIRALTY.—The following appointments have been made:—Staff Surgeon Richard A. Mowll, M.D., to the *Rocket*, vice Mackie; Surgeon John Mackie, to the *Penguin*, vice Williamson; Surgeon Henry M. Levinge, to the *Flirt*; Surgeon James Hitchcock, M.B., agent at Gamrie, N.B.

MEDICAL NOTES IN PARLIAMENT.

IN the House of Lords on Tuesday the Veterinary Surgeons Bill was read a second time.

In the House of Commons on Thursday, May 26th, Mr. Duckham gave notice that on the motion to go into committee on the Lunacy Law Amendment Bill he will move its rejection.

The Case of Captain Butler.

On Friday, Mr. Childers, in reply to Mr. M'Coan, said it was the case that Captain Butler was granted twelve months' sick leave from India, which leave was further extended for six months. He was informed that if at the expiration of that period he was still unfit for service he would be called upon to resign. However, he reported himself sick, and was so found by a medical board, and was accordingly ordered to embark for India. On the day before he should have embarked he sent in a certificate from a civil doctor to the effect that he was unfit to return. He asked, too, for four months' more leave, and upon that he was called upon to retire. There was another reason, of a non-medical character, which made Captain Butler unwilling to return, and that was that he believed he would be arrested for debt as soon as he landed at Bombay. Mr. Childers did not purpose to lay on the table any such return as the hon. gentleman suggested. He did not think it was the wish of the House to interfere with questions of this kind, which were essentially questions for the Commander-in-Chief, subject to an appeal to the Secretary of State.

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A petition for alteration of the Lunacy Laws was presented from Limerick. Dr. Lyons has given notice of his intention to move that the Infectious Diseases Notification (Ireland) Bill be referred to a select committee. The Solicitor-General for Ireland and Mr. Meldon have put upon the paper a number of amendments which they propose to move in Committee on the Bill.

Vaccination.

On Monday, Mr. Hopwood asked the President of the Local Government Board whether it was the fact that the matron and one or more nurses at the hospital at Halifax had recently taken small-pox, a few days after revaccination; whether there was any reason to believe the vaccination was of variolous matter; and, whether it was the fact that there was in use in the country a large quantity of vaccine which was in fact variolous matter, or small-pox communicated from the human subject to cattle, and from them extracted and used in inoculation under the Vaccination Acts.—Mr. Dodson replied that the facts of the case were these: At the end of March last a small-pox patient was sent to Halifax Fever Hospital. Thereupon the matron and the nurses were strongly urged to be revaccinated, but they all refused. Three weeks afterwards the matron showed symptoms of the disease, and the day following four of the nurses were vaccinated. One of these had a slight attack of small-pox, which showed itself in two days, and another a more severe attack in four days afterwards. Therefore they must all have been affected by the disease when the vaccination took place, and when the vaccination could be of no avail. The other two nurses escaped altogether. There was no reason to believe that the vaccination was of variolous matter, and the medical man who vaccinated them distinctly stated that it was good vaccine lymph. As to the last part of the question, if variolous matter was intended to mean small-pox, or matter capable of producing small-pox, there was no such matter used in vaccination under the Vaccination Acts. As a matter of fact, he was informed that all attempts of late years to produce small-pox by inoculation of variolous matter appear to have been abortive.

A petition was presented from R. Power for inquiry in connexion with the Indian Army Medical Service. A copy was presented of papers respecting medical officers in India. Mr. Sexton gave notice of a question as to the sanitary accommodation in Kilmainham prison, which he described as insufficient and filthy.

The Local Government Board and the Small-pox Epidemic.

Dr. Cameron gave notice, that on Friday, the 17th inst., on going into Supply, he will call attention to the lack of capacity and resource displayed by the Local Government Board in dealing with the small-pox epidemic at present raging in London; and to move that this House deplores the death and suffering caused by the epidemic of small-pox at present raging in London, and condemns the conduct of the Local Government Board in refusing to take the most obvious means to encourage revaccination, and in witnessing the compulsory closing of small-pox hospital accommodation, when most urgently needed, without attempting to enable adequate provision to be secured for the reception of small-pox patients, thereby leaving hundreds of cases destitute of proper treatment, and sources of infection to densely peopled localities.

Vaccination Prosecution at Warrington.

Mr. P. A. Taylor asked the Secretary of State for the Home Department if he had come to any decision in regard to the fines illegally imposed upon six persons (amounting with costs to 36*s.* 6*d.* each) at Warrington, for refusing to have their children vaccinated, the conviction having been made under the 29th clause of the Vaccination Act, while the children were from three to six years old.—Sir W. Harcourt said the conviction could not be sustained, and he had directed the fines to be remitted.

On Thursday, the Attorney-General for Ireland stated that he had received a report, in the absence of Mr. Forster, that the sanitary accommodation at Kilmainham prison was adequate and satisfactory.—Mr. T. P. O'Connor remarked that his information was entirely to the contrary.

The Contagious Diseases Acts.

Mr. Hopwood asked the Secretary of State for the Home Department whether it was the fact that one or more surgeons employed in the compulsory examination of prostitutes under the Contagious Diseases Acts had been made justices of the peace, in order that they might carry out the Acts in a two-fold capacity, administering and executing the law; whether he would state by what Minister such gentlemen were recommended to Her Majesty for appointment; whether he approved of such a confusion of duties; and whether the individuals in question should not be called upon to make their choice in respect of those Acts to act either as magistrates or as surgeons only.—Sir W. Harcourt replied that he had no further information on this matter since the hon. member asked the question before. If the hon. member had any ground to think that any of these individuals had been improperly appointed, or had improperly conducted themselves in this matter, and if he would be good enough to state that ground, he (Sir W. Harcourt) would order an inquiry to be made on the subject.—Mr. Hopwood wished to ask the right hon. gentleman if he had not received a letter from him, in which he had mentioned certain persons who were employed in this double capacity, at Devonport, Windsor, and Northampton; and he desired to know whether the right hon. gentleman thought these gentlemen should be allowed in the interests of the public service to continue to discharge double functions.—Sir W. Harcourt said he had no exact information on the subject, but he would inquire what were the facts about these gentlemen.—Subsequently Mr. Carbutt asked if they were to understand that due inquiry would be made in the matter, and if it was found that the gentlemen were acting in a double capacity he would express an opinion that that should not continue, as there was an appeal under the Act for the examining surgeon to the justice of the peace, and they must in that case be the same person.—Sir W. Harcourt said he would make full inquiry into the matter, and the question could then be repeated.

Correspondence.

"Audi alteram partem."

CLINICAL TEACHING AT ADDENBROOKE'S HOSPITAL, CAMBRIDGE.

To the Editor of THE LANCET.

SIR,—As I have had special opportunities of estimating the value of the clinical teaching at Addenbrooke's Hospital, I shall be glad if you will allow me space for a few remarks before the correspondence on the subject is closed.

It is unnecessary to say a word as to the merits of the lecturers of the Cambridge School; their well-known names are a sufficient guarantee of the excellent teaching which is given there. The clinical material, too, to be found in the hospital wards, and especially in the medical wards, will compare most favourably with that at the disposal of the staff of any of our large London hospitals. And yet in many respects the teaching might, I believe, be made more useful. There, as elsewhere, the physician may be found explaining to students, ignorant of the elements of anatomy and physiology, the differential diagnosis of an obscure case of disease. And there, as elsewhere, students may be seen wasting the most precious hours of the morning listening to able clinical lectures, when they were perhaps ignorant of the very name of the disease which the lecturer is illustrating before they entered the class-room. The compulsory attendance on hospital practice and clinical lectures for twelve months prior to passing the Second M.B. Examination is, I know, felt to be a great grievance by many of the hardest working students of the school, and considering that three more years must be so spent before the third M.B. is passed, the time might, I think, with great advantage be reduced to six months. It will scarcely be denied that to attempt to teach physical diagnosis to men ignorant of the mechanism of the heart and the course of the blood-stream is a waste of time on the part of both teacher and taught. Before the student enters the medical wards of a hospital he must at least be acquainted with these elementary facts, if the time there spent is to bring him any return in sound knowledge. I would suggest that students beginning hospital work should be compelled to attend the surgical practice for the first six months, and should not be admitted to the medical wards until they have dissected for at least one winter session, and are acquainted with the anatomy of the thoracic and abdominal viscera. I would also suggest

that the visits of the staff to the wards should be made in the afternoon. During the time spent by most men at Cambridge the scientific part of their training is of far greater importance than the purely practical, and to it should be devoted the best working hours of the day. The undergraduate who has no special object in view in his studies may perhaps be right in considering that from three to four hours' reading in the morning constitutes a fair day's work, but it is not unreasonable to ask men who are studying for a profession which embraces such a wide range of subjects as medicine to devote one hour of the afternoon to hospital work.

Cambridge can never provide a complete medical training, but there is no reason why students should not leave there for the London hospitals as thoroughly instructed in the preliminaries of the practical as in the difficulties of the scientific aspect of medicine. The great interest I take in the Cambridge Medical School must be my apology for what may be considered an attempt to instruct my teachers.

I am, Sir, yours truly,

Clarges-street, May, 1881. J. K. FOWLER.

To the Editor of THE LANCET.

SIR,—Your correspondent "Medicus" says the remarks I made about the practical teaching at Addenbrooke's Hospital require some explanation. If I may have unintentionally made it appear that the physicians and surgeons are wanting in zeal, my letter not only requires an explanation, but they require an apology, for it would be hard to find in any one metropolitan hospital more zealous and skilful teachers than Drs. Paget, Latham, Humphry, Bradbury, and Wherry; but, occupied as they are with the cares of large private practices, it is next to impossible for them to spend several hours daily in seeing out-patients, in addition to those in the wards, consequently the "objects of interest" in the wards get the lion's share of the students' attention, to the comparative neglect of that storehouse of useful, but unhappily unused material, the out-patient department, the administration of which is chiefly relegated to the house-physician and surgeon. So that we find the Cambridge medical student towards the close of his career too often strangely deficient in that knowledge which will be required of him a little while hence, and crammed with a catalogue of curious cases, which, like dewdrops upon the grass, will melt and vanish in the heat and burden of the day.

I am, Sir, yours obediently,

May, 1881. A CAMBRIDGE UNDERGRADUATE.

SPONTANEOUS COW-POX.

To the Editor of THE LANCET.

SIR,—As even Dr. Carpenter (who believes in the fundamental identity of vaccinia and variola) now suggests having recourse again to the cow for an entirely new supply of lymph to replace the present deteriorated stock, I presume that there is little doubt that such an attempt will be made on a considerable scale.

The question now arises whether it would be best made with a foreign or native stock. If a foreign stock is selected it is evident that much must be taken upon trust of which the fullest evidence is desirable. My own faith in the virtues of either is limited; but being patriotic, I like to give the preference to the native article, and therefore place at your disposal the information recently sent to me from the county of Elgin, N.B., where it appears the disease vaccinia is by no means extinct, and every year it breaks out in one of the farms. Let me suggest that such lymph be fairly tried, and a record kept of its effects, carefully separating such record from that of persons vaccinated with lymph from other sources. The extreme activity of lymph which has not been humanised by passing through some human beings will always constitute a difficulty when the question of compulsion has to be considered. But the alternative of having to run a risk, now acknowledged by all parties to exist (and which is enough to make the firmest believer shudder), absolutely leaves no option to those who have to administer the law. Animal lymph must be provided for *the whole people*, or the principle of compulsion must be finally abandoned.

I am, Sir, your obedient servant,

EDWARD HAUGHTON, M.D.

Upper Norwood, S.E., May 28th, 1881.

LIVER ABSCESS AND DYSENTERY.

To the Editor of THE LANCET.

SIR,—As the April number of the *Indian Medical Gazette*, just to hand, which contains the closing portion of a lengthy paper of mine on Hepatitis, contains also the matured opinions I arrived at some years ago, as to the relationship between "liver abscess and dysentery" in that country, I extract the same below, and will thank you to insert it in THE LANCET in that connexion by an early date. With this proviso, however, that were I recasting that paragraph again I would word it in a very different and much more emphatic phraseology than it now wears. In other words, instead of admitting reluctantly, as I do within, that this interdependence is "not proven," I should now say that it does not exist, or, if so, however remotely, that the liver "leads the way."

The considerations on which this conclusion is based are too minute or numerous for reproduction here; they are, moreover, so personal to myself, or to the subject under review, that I could scarcely hope to be able to explain them properly without going into details that might appear trivial or irrelevant; and this being so, I would respectfully ask any gentleman who may condescend to notice this little communication to begin any reference he may make to it with the intimation that he has *personally* investigated the matter for himself, as I have done, on the spot, *coram cadavere*; otherwise I will not again recur to the question, for it accords with my experience that Indian observers are just as keen at copying one another in this and other particulars as are their brethren nearer home; and as to the statistics of the case, they are not, in my opinion, worth the paper they are written on.

Discussing then the *locale* of abscess in the liver in India as above, and after stating that, according to my observation, it is more frequently developed in the centre, or rather towards the upper surface, of the right lobe than in any other part of that organ in the North-west and the Punjab, I proceed to say that, such being the case, "it would follow that the abscess would be more likely to eat its way into the chest than into the abdomen; and this too is," I add, "the most usual termination of the two." Then continuing, I say: "Again, this situation would seem to imply a local rather than an eccentric irritation; and I have for many years regarded the interdependence or relationship that is said by some pathologists to exist between bowel disorder and hepatic suppuration as—to use the mildest phrase at my command—not proven."

Though it cannot be denied that "the large intestine does, in the majority of cases of abscess of the liver, present important morbid alterations, especially in tropical countries," yet "are we quite unable to trace any such anatomical continuity of propagation in most cases of hepatic abscess, *while on such a supposition hepatitis ought to be infinitely more frequent than it really is*"; and I most heartily concur with Frerichs when he says, at vol. ii. p. 116, that "*the connexion between intestinal ulceration and hepatitis, as cause and effect, has been by no means established*, although it cannot be denied that in exceptional cases, under favourable circumstances, dysenteric and other forms of ulcerations of the bowels *may possibly* induce phlebitis of the roots of the portal veins, and so give rise to abscess of the liver." The italics are mine, but they are only used to emphasise the more my own willing endorsement of his opinion; and I have looked in vain for the last fifteen years for any or such a confirmation of Budd's views on this point as would induce or oblige me to change my own. I have long harboured an impression, which now amounts almost to a conviction, that no such relationship or interaction exists; and I believe that the contrary opinion has been developed too hastily, or that it is based on a generalisation which a wider field of observation would question or overthrow.

Your obedient servant,

Ashton-under-Lyne, May, 1881. WM. CURRAN.

P.S.—Allow me to add that this paragraph was written five years ago at Sitapur, and to suggest that a circular through the P.M.O.'s office in India, addressed to such senior officers only as had personally tested the point for themselves, would be the best, if not the only effectual, means of acquiring practical information on this moot question.

PUERPERAL MORTALITY IN WORKHOUSES.

To the Editor of THE LANCET.

SIR,—The Local Government Board are collecting statistics upon a subject of interest to obstetricians, and as I append the form with a few additions of my own, I need not explain why I do not know what may be the object of the Local Government Board, but I can see that some useful information may be gathered from the numerous workhouse infirmaries in England which may help in clearing up many moot points in connexion with midwifery. I think this is another score in favour of the value of workhouse infirmaries as a means of solving many of the grave problems which disease opens out (THE LANCET Commission, 1866). A careful analysis of all the facts will show the mortality, class of patients, and the rest, and a comparison may then be made with similar facts obtained from our general lying-in hospitals. Perhaps the Obstetrical Society of London might, on seeing the nature of the facts collected, deem the subject worthy of their attention.

HALIFAX UNION INFIRMARIES.

Returns showing the Number of Births in the Workhouse or Lying-in Wards of the Union, and the Number of Women Confined therein who Died in Childbirth or from causes connected therewith, during the past Ten Years, with other particulars relating thereto.

1	2			3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	* —
Years.	Boys.	Girls.	Total.	First confinements.	Married.	Single.	Twins.	Puerperal fever.	Hæmorrhage.	Convulsions.	Puerperal peritonitis.	Other causes.	Total.	Remarks.	Version.	Craniotomy.	Forceps.	Still-born.	Mothers syphilitic.
1871	9	4	13	10	1	12	...	...	...	...	...	...	...	...	...	...	...	1	...
1872	11	7	18	15	2	16	...	...	...	...	...	...	...	...	...	...	...	...	...
1873	12	2	14	11	1	13	...	...	...	...	...	...	...	...	...	...	...	2	...
1874	7	17	24	20	2	22	...	...	...	...	...	...	...	...	...	...	...	1	3
1875	12	7	19	11	2	16	1	...	...	...	...	...	...	...	...	...	1	...	...
1876	14	11	25	19	1	24	...	...	...	...	...	...	...	...	1	...	2	...	2
1877	12	10	22	17	1	20	1	1*	...	...	...	...	1	...	...	...	1	1	...
1878	10	12	22	15	2	21	...	...	...	...	...	...	...	...	...	...	2	1	1
1879	15	6	21	17	3	18	...	...	...	...	...	...	...	...	...	...	2	...	...
1880	13	11	24	19	2	21	1	...	...	...	...	...	...	...	1	...	2	3	1
Totals...	115	87	202	154	17	183	3	1	...	...	...	...	1	...	2	...	10	9	7

* Puerperal septicæmia. Full particulars of this case were published in the Obstetrical Journal, November, 1878.

I am, Sir, yours &c.,
T. M. DOLAN, L.R.C.P.E.

May, 1881.

THE DURHAM UNIVERSITY SURGICAL DEGREE.—IS IT M.S. OR C.M.?

To the Editor of THE LANCET.

SIR,—Will you kindly insert the following correspondence, which will speak for itself?

The facts that the Durham University authorities give an extra paper in Surgery to, and require of candidates for their Mastership in Surgery the performance of operations on the dead subject in the presence of the examiners, and consider it an Honours degree, seemed to demand that the matter at issue should be settled by authority.

I am, Sir, very faithfully yours,
W. BARRETT ROUÉ, M.B., M.S. Durh.,
Physician to the Bristol Hospital for Sick Children.

[COPY.]

165, White Ladies-road, Bristol, March 2nd, 1881.

DEAR DR. PHILIPSON,—When I forwarded my qualifications to Messrs. Churchill for their Medical Directory, 1881, I entered M.B., M.S. On consulting the publication I was surprised to find the letters M.S. had been exchanged for C.M.

Again, when I sent notice of a recent appointment to THE LANCET, I used the letters M.B., M.S., and found that the authorities of that paper had also altered the letters M.S. to C.M.

May I ask you, therefore, to send me an official statement in your capacity as Professor of Medicine in the University of Durham as to what letters surgical graduates of the University are entitled to use.

With your permission I intend publishing this letter and your reply in the medical journals.

I am, dear Dr. Philipson, very faithfully yours,
W. BARRETT ROUÉ.

G. H. Philipson, Esq., M.D., F.R.C.P., Professor of Medicine, Durham University.

[COPY.]

7, Eldon-square, Newcastle-upon-Tyne, May 24th, 1881.

DEAR DR. ROUÉ,—I have much pleasure in informing you that the Senate of the University of Durham, at their meeting this day agreed "that Masters in Surgery should be permitted to use the letters M.S. as the abbreviation of the degree."

With very kind regards and every good wish,
I remain, yours faithfully,
(Signed) G. H. PHILIPSON.

W. B. Roué, Esq., M.B., M.S., 165, White Ladies-road, Bristol.

GLASGOW.

(*From our own Correspondent.*)

LAST year a series of papers appeared in the *Glasgow Medical Journal*, written by Dr. F. Henderson, of Helensburgh, on a form of "endemic influenza," which he stated was prevalent in the district in which he lived. This influenza he attributed to effluvia from the polluted water of the Clyde, and from the Glasgow sewage which is carried down the river and deposited on the foreshores of Helensburgh and the Garelloch district generally by the ebb and flow of the

tide. This charge was rather a serious one to bring against a favourite seaside resort, "the Brighton of Scotland," and as it cut directly at the source of income of many of the inhabitants, they, through the town commissioners, set themselves to prove that their shores are as clean and their waters as pure as their general surroundings are lovely, and no one can deny that they have succeeded, to their own satisfaction at least. The report of the Commissioners in the matter shows that Dr. Henderson's endemic influenza has no existence in the locality, that the waters of the bay contain less impurity than certain of the London drinking waters, that the "sand" taken from the shore is as pure as that obtained from Lamlash, in the Island of Arran, and that the sewage discharged into Helensburgh bay is "a very mild sewage." The report, in fact, proves far too much. It is undeniable that not so very long ago the waters of this part of the firth were clear and pleasant to look at; but it is well known that for some years impurities have been increasing at such a rate, both in the water and on the shore, that sea-bathing has become a practical impossibility. It is evident that this matter cannot rest where it is; it needs further clearing up. Dr. Henderson's reply to this apparently crushing report is awaited with some curiosity.

Several cases of small-pox have been detected in Glasgow lately. With one exception they were observed among Continental emigrants, who pass through Glasgow for America in such numbers at this season of the year. The appearance of the disease here has put our sanitary authorities on the alert, and it is now arranged that emigrants passing through Scotland shall be examined at the port of debarkation, so that persons presenting signs of small-pox shall be prevented carrying it further.

Obituary.

WILLIAM DONALD NAPIER.

IT is our painful duty to record the sudden decease of Mr. William Donald Napier, a gentleman who has for many years occupied a high position in the profession. At an early period of his career he devoted his attention to the special study of dental surgery, and nearly thirty years ago commenced to practise that branch of surgical work, and continued to do so with marked success until his decease, which happened, somewhat suddenly, on Thursday, the 26th ult. He had been in delicate health for some time past, but by relaxation from the more arduous duties of practice his friends hoped that he might survive for many years. Mr. Napier was a member of the Royal College of Surgeons, and a Fellow of several of the Medical Societies. He took a very keen interest in the ethics of the profession, and was most earnest in maintaining the privileges of surgeons who, like himself, have devoted their lives to the special practice of dental surgery. The services he rendered, almost single-handed, to the surgical profession, as distinguished from the outlying class of "dentists" who are not surgeons, cannot be soon forgotten, and should not remain unacknowledged by the general body of medical practitioners, or the Association of Surgeons Practising Dentistry, whose honour he stoutly upheld. Mr. Napier was a man of most elegant taste, and in private life an affectionate and kind friend.

COOMBE LYING-IN HOSPITAL, DUBLIN.—The fifty-third annual meeting of the subscribers to this hospital was held last week; and from the annual report we learn that the income for the year ending March 31st last amounted to £1502, being a decrease of £264 as compared with the previous year, while the expenditure was £1755. The Board trust that the necessary help will be forthcoming to enable them to clear off the debt of £1043 they have incurred. This necessity is greater than ever, owing to the closing of the maternity department of Steevens' Hospital, so that the entire district now depends upon the Coombe Lying-in Hospital for the care of those requiring aid in labour. The Board have appointed Dr. Samuel Gordon, Ex-president of the College of Physicians, a consulting physician in the room of the late Dr. Alfred Hudson; while the vacant assistant-mastership has been filled by the appointment of Dr. Poole, who, with Dr. Neville, resides in the hospital. We understand that since the annual meeting was held special subscriptions amounting to £259 have been received.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed the First Part of the Professional Examination for the Fellowship at a meeting of the Board of Examiners on the 26th ult.:—

John B. Sutton, Middlesex Hospital; Frederick Deighton, Cambridge and St. George's Hospital; Bertram H. L. Stivens, King's College; Alfred Lingard, St. Thomas's Hospital; Richd. F. Rand, Edinburgh and Glasgow; Arthur B. Prowse, Liverpool and St. Mary's Hospital; Percy Edgelow, St. George's Hospital; William R. Buckell, University College; James Wilson, Belfast.

Of the 98 candidates who were admitted for examination during last week, 57, or over 58 per cent., failed to satisfy the Board of Examiners, and were referred for six months' further anatomical and physiological study.

The Final Examination for the Fellowship was brought to a close on Monday last. Of the 27 candidates examined 10, or 37 per cent., were rejected. We shall publish the list of names next week. At the corresponding period last year there were only 68 candidates examined, of which number 31, or 45·5 per cent., were rejected.

[In the list of Members published in our last, for "Joseph Wilmot Buxton" read "Dudley Wilmot Buxton."]

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on May 26th:—

Douty, Joel Harrington, Middlesex Hospital.
Goddard, Walter Horace, Norfolk-crescent.
Greene, Henry, Norfolk-crescent.
Odling, Alfred Edward, St. Thomas's Hospital.
Ranson, William Edward, Alfred-place.

The following gentleman also on the same day passed the Primary Professional Examination:—

Augustus Frederick Clay, General Hospital, Birmingham.

THE power of granting degrees in medicine, as well as in laws, science, and music, has been granted to the University of Adelaide, South Australia.

THE JACKSONIAN PRIZE.—The subject of this prize for the ensuing year is "Wounds and other Injuries of Nerves, their Symptoms, Pathology, and Treatment." For the present year, it is the "Pathology and Surgical Treatment of Diseases of the Hip-joint."

ROYAL HOSPITAL FOR INCURABLES.—The day of the opening of the new wing of the Royal Hospital for Incurables by the Duke of Connaught, originally fixed for the 9th of July, has been altered to the 16th in consequence of the Royal Volunteer review at Windsor being ordered for the 9th.

PROFESSOR GERALD YEO will commence his course of three lectures "On the Application of the Graphic Method to the Study of Muscle Contraction," in the theatre of the Royal College of Surgeons, on Monday next, the 6th inst.: the first lecture, on the "Phases and Varieties of a Single Contraction;" Lecture 2, "The Summation of Contractions and Tetanus;" and Lecture 3, "On Fatigue and Recuperation."

EAST LONDON HOSPITAL FOR CHILDREN.—The fourteenth annual meeting of the governors of this useful charity was held this week. The receipts during the past year were £11,313, being an increase of £4959 over those of 1879–80. The expenditure amounted to £6007. It is intended to apply the balance to the work of building and furnishing the third storey, and to the enlargement of the out-patient department.

AT the seventy-fourth annual festival of the London Truss Society, held on the 27th ult. at the Albion Tavern, and over which Mr. Sheriff Waterlow presided, it was stated that during the past year more than 9000 persons had received the benefits of the charity, a number exceeding by 561 that of any previous year, and since its foundation 369,515 people had been relieved by the society. Donations and subscriptions to the amount of £600 were announced at the meeting.

RECENTLY Dr. Baird of Perth, who appears to have been for some time indisposed by illness, was waited upon by a deputation composed of leading citizens of Perth, and presented with a purse of 200 guineas, accompanied by an expression of the esteem in which he was held, and of sympathy with him in his affliction.

UNIVERSITY COLLEGE HOSPITAL.—At University College, on Wednesday afternoon, Mr. Justice Fry presiding, Mr. Justice Watkin Williams distributed the medals and prize certificates to the successful students in the medical faculty. The gold medals were awarded in anatomy, to E. Hudson; in physiology, to W. A. Gostling; in chemistry, to P. Mukerji; in medicine, to W. C. Wilkinson; in surgery, to C. Stonham; in zoology and comparative anatomy, to A. E. Tovey; and in clinical medicine, to C. Stonham. Afterwards Mr. Justice Watkin Williams briefly addressed the students.

BROMPTON CONSUMPTION HOSPITAL.—By the report read at the annual court of governors of this charity, held last week, it appears that during the year 1880 the number of patients admitted was fifty-four in excess of that of the previous twelvemonth. Of the total number of admissions (904), and of those remaining at the end of 1879 (185), there were discharged greatly benefited 795, and 102 deaths. The new extensive building, to contain 137 additional beds, was nearly completed, and payments on account of the contracts to the amount of £51,673 had already been made.

LONDON HOSPITAL MEDICAL SCHOOL.—The following is a list of the results of the late scholarship examinations:—Clinical Medicine: Mr. J. A. Williams, Mr. Harris (honorary certificate), Mr. Adkins (honorary certificate). Clinical Surgery: Mr. J. A. Williams. Duckworth Nelson Prize: Mr. J. A. Williams, Mr. Russell (honorary certificate). Anatomy Scholarship: Mr. Allden, Mr. J. Thomas (honorary certificate), Mr. Langston (honorary certificate). Anatomy, Physiology, and Chemistry Scholarship: Mr. F. H. Taylor, Mr. Gordon (honorary certificate). Out-patient Dressers' Prizes: Mr. Nicholson, £15; Mr. F. H. Taylor, £15; Mr. Blaxland, £10.

THE BRITISH MEDICAL TEMPERANCE ASSOCIATION. The fifth annual meeting of the above Association was held on Friday, May 27th, at the rooms of the Medical Society of London, under the presidency of Dr. B. W. Richardson. The report stated that the number of members had increased to 250 and of associates to sixteen, the latter being medical students, and alluded to the fact that there are known to be many more abstaining medical men at present unconnected with the association. The accounts were presented, and showed a balance in hand of £9 0s. 6d. The re-elected officers having been installed, S. S. Alford, Esq., read a paper on "The Practical Treatment of Dipsomania." A warm discussion followed, which was adjourned till that day month.

BOOKS ETC. RECEIVED.

BAILLIÈRE ET FILS, Paris.
L'Œuvre de Claude Bernard. Introduction par Mathias Duval; Notices par E. Renan, Paul Bert, et Armand Moreau; Table Alphabétique par le Dr. Roger de la Coudraie; Bibliographie des Travaux Scientifiques, etc., par G. Malloizel. pp. 384, avec un Portrait.
Recherches Histologiques sur le Tissu Connectif de la Cornée des Animaux Vertébrés. Par le Dr. Med. Eloui. pp. 130. Avec six Planches.

BLACK, A. & C., Edinburgh.
France, South Half; or South beyond the Loire. Third Edition. Illustrated with 13 Maps and 19 Plans.
Encyclopædia Britannica. Ninth Edition. Edited by T. S. Baynes, LL.D. &c. Parts XLV. & XLVI.

BLAKISTON, P., Philadelphia; TRÜBNER & Co., London.
Plastics and Plastic Fillings. By J. F. Flagg, D.D.S. pp. 207. With Illustrations.

CHURCHILL, J. & A., London.
Lectures on Diseases of the Nervous System, especially in Women. By S. Weir Mitchell, M.D. pp. 238. With 5 Plates.
Contributions to Military and State Medicine. By John Martin, A.M.D. Vol. I. pp. 506.
On the Mont Dore Cure, and the Way to Use it. By Horace Dobell, M.D. pp. 179.
Deformities of the Mouth, Congenital and Acquired, with their Mechanical Treatment. By Oakley Coles. Third Edition. pp. 223. With 83 Wood Engravings and 96 Drawings on Stone.

DAVIS, G. S., Detroit.
The Student's Manual of Histology. By C. H. Stowell, M.D. pp. 279. With 102 Engravings.

LEWIS, H. K., London.
Roumanian Fairy Tales and Legends. pp. 124. Illustrated.
Lectures upon Diseases of the Rectum and the Surgery of the Lower Bowel. By W. H. Van Buren, M.D., LL.D. pp. 412. With Illustrations.

LEYPOLDT, F., New York; TRÜBNER & Co., London.
The Index Medicus: a Monthly Classified Record of the Current Medical Literature of the World. Compiled under the Supervision of Dr. J. S. Billings and Dr. Robert Fletcher, M.E.C.S.E. Vols. I. & II.

LIPPINCOTT, J. P., & Co., Philadelphia.
A System of Oral Surgery. By J. E. Garretson, M.D., D.D.S. Third Edition, thoroughly Revised, with Additions. pp. 916. With Steel Plates and Woodcuts.

LIVINGSTONE, E. & S., Edinburgh.
Dr. Gheist: an Autobiography from the Midlands. pp. 285.

LONGMANS, GREEN, & Co., London.
Note-book of an Amateur Geologist. By J. E. Lee, F.G.S., F.S.A. pp. 80. With 209 Plates.
Selections from the best Latin Authors. By the Rev. E. Fowle and the Rev. W. E. Whitaker, B.A. pp. 127.

LOW (SAMPSON) & Co., London.
De la Syphilis Tertiaire dans la Seconde Enfance et chez les Adolescents. Par Dr. Antoine Rousset. pp. 252.
De quelques Troubles Mécanique de la Circulation du Sang dans les Maladies du Cœur et dans la Compression des Valsseaux. Par Dr. F. Beaudouin. pp. 129. Avec Tracés Sphygmographiques.
Nature Parasitaire des Accidents de l'Impaludisme. Par Dr. A. Laveran. pp. 103. Avec deux Planches Lithographiées.
Wood's Household Practice of Medicine, Hygiene, and Surgery. Edited by Fred. A. Castle, M.D. In 2 vols. pp. 819-942. Illustrated by over 700 Wood Engravings.
Supplement to Ziemssen's Cyclopædia of the Practice of Medicine. Edited by G. L. Peabody, M.D. pp. 944. Illustrated.

MACMILLAN & Co., London.
The Relations of Science and Religion. By H. Calderwood, LL.D. pp. 323.

NEW SYDENHAM SOCIETY, London.
An Atlas of Illustrations of Pathology. Fasciculus III.: Diseases of the Liver (Plates 11 to 16).

PAUL, C. KEGAN, & Co., London.
Illusions: a Psychological Study. By James Sully. pp. 372.

PUTNAM'S SONS, New York.
A Manual on Diseases of the Eye and Ear, for the Use of Students and Practitioners. By W. F. Mittendorf, M.D. pp. 430. Illustrated with Coloured Lithographs and Woodcuts.

REEVES, W., London.
English Etchings: a Monthly Publication of Original Etchings by English Artists. Part I.

STEWART & Co., London; Menzies, Edinburgh.
Practical Botany for Elementary Students. By D. Houston. pp. 136.

WATERLOW BROS. & LAYTON, London.
The Public Health and Local Government Act, 1875, and the Statutes incorporated therewith, with Short Explanatory Notes. By J. V. Vesey Fitzgerald, B.A. Third Edition, Rewritten and Enlarged. pp. 469—lv.

Edinburgh Medical School; Guide to Students. (Livingstone.)—Mr. Spencer Wells's Note-book for Cases of Ovarian and other Abdominal Tumours; Sixth Edition. (Churchills.)—Die Nebenwirkungen der Arzneimittel; Pharmacologisch-Klinisches Handbuch, von Dr. L. Lewin. (Hirschwald, Berlin.)—Duration of Normal Human Pregnancy; by Dr. P. O'Connell.—Popular Science Monthly, May.—Sanitary Assurance; by Prof. F. de Chaumont, F.R.S.—Clinical Studies on the Pepsical Peptones of Chapoteaut.—Ueber die Folgen von Drucksteigerung in der Paukenhöhle und die Function der Bogengänge; von Dr. Benno Baginsky.—Syllabus of Materia Medica; by Drs. A. Harvey and A. D. Davidson: Fifth Edition. (Lewis.)—Archives of Otology, March. (Putnam's Sons.)—New Commercial Drugs and Plants; by Thos. Christy, F.L.S.—Trance and Trancoidal States in the Lower Animals; by Dr. G. M. Beard.—How we Catch Cold, and how to avoid it; by Dr. T. G. Wright; Third Edition. (Churchills.)—Medical Reports of the China Imperial Maritime Customs for the Half-year ending Sept. 30th, 1880.—The Functions of Microscopic Organisms in the Economy of Nature; by O. Hehner, F.C.S.—Rational Sunday Observance; by J. F. Clarke, D.D.—On the Localisation of Diseases in the Spinal Cord; The Cultivation of Specialties in Medicine; by Dr. E. C. Seguin.—The Scientific Roll; conducted by A. Ramsay, F.G.S.—Lehrbuch der Physikalischen Heilmethoden für Aertze und Studirende; von Dr. M. J. Rosebach; erste Hälfte. (Hirschwald, Berlin.)—The Eustachian Tube; by T. F. Rumbold, M.D.—Le Daltonisme; Rapport présenté à M. le Ministre des Travaux Publics, par le Dr. A. Dekeersmaecker. (Muscaux, Bruxelles.)—Shortening of Limbs after Fracture; by Lewis A. Sayre, M.D.—Sectional Proceedings of the National Association for the Promotion of Social Science, May.—Fraser's Magazine, June.—Girl's Own Paper, June.—Good Words, June.—Sunday Magazine, June.—Hardwicke's Science Gossip, June.—The Contemporary Review, June.—The Veterinarian, June.—Heart Starvation; by Dr. J. M. Fothergill. (Lewis.)—Health Lectures for the People. (Heywood, Manchester.)—Unnecessary Surgical Operations in the Treatment of Diseases of Women; by Dr. C. E. Wing, Boston.—A Practical Method of Analysis of the Simpler Chemical Salts, arranged in a Concise Form; by H. A. Phillips. (Wyllie, Aberdeen.)—The Feeding of Infants, together with the Preparation of Food for the Sick and Infirm; by Thomas Carter Wigg, M.D. (Bemrose.)—The Cariabrooke Magazine, June.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning, at the latest*

BAKER, J. B., L.R.C.P., M.R.C.S.E., has been appointed House-Physician to Charing-cross Hospital.

BARR, J., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer for the Towcester Union, vice Floyer, resigned.

BELLINGHAM, J., M.R.C.S.E., has been appointed Medical Officer to the North District of the Dudley Union.

BOOTH, L., M.D., M.R.C.S.E., &c., has been elected Medical Officer of Sherburn Hospital, near Durham, vice R. W. Gillespie, resigned.

CANNING, P. W. G., R.N., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Resident House-Surgeon to the Hull and Sculcoates Dispensary.

FRASER, T., M.B., L.R.C.P.Ed., has been appointed Medical Officer to the Workhouse of the Berwick-on-Tweed Union, vice Brown, resigned.

GORDON, S., M.D., has been appointed Consulting Physician to the Coombe Lying-in Hospital, vice Hudson, deceased.

GRINDON, F. J., L.S.A.L., has been appointed Resident Obstetrical Officer to Charing-cross Hospital.

JULER, H. E., M.B., F.R.C.S.E., has been appointed Assistant Surgeon to the Royal Westminster Ophthalmic Hospital.

KILNER, C. S., M.B., C.M., has been appointed Medical Officer to the Workhouse of the Thingoe Union, vice Wing, resigned.

LEWIS, W. A. A., L.R.C.P. & L.R.C.S., has been appointed Surgeon to the Oswestry Cottage Hospital and Oswestry Dispensary, vice J. S. Davies, M.R.C.S.E. & L.S.A.L., deceased.

LYSTER, Mr. C. R. C., has been appointed Assistant House-Physician to Charing-cross Hospital.

MOSSE, Mr. H. R., has been appointed Assistant House-Surgeon to Charing-cross Hospital.

PARKER, G. R., L.R.C.P.L., M.R.C.S.E., has been appointed Medical Officer to the Southern District of the Lancaster Union.

POOLE, W. C., M.B., L.R.C.S.I., has been appointed Assistant Master of the Coombe Lying-in Hospital.

ROBERTSON, J., M.D., L.R.C.S.Ed., has been appointed Medical Officer of Health for the Cockermouth Rural Sanitary District.

SPENDER, T. K., M.D., M.R.C.S.E., L.S.A.L., has been appointed Physician to the Bath Mineral Water Hospital, vice Falconer, deceased.

STAFFORD, T. E., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer for the Maxey District of the Peterborough Union.

TAYLOR, F. E., M.R.C.S.E., has been appointed House-Surgeon to Charing-cross Hospital.

VALLANCE, T. J., M.D., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer to the Schools of the West Ham Union.

WOODHEAD, G. S., M.B., M.R.C.P.Ed., has been appointed Demonstrator of Pathology and Assistant to the Professor of Pathology in the University of Edinburgh.

Births, Marriages, and Deaths.

BIRTHS.

ARMSTRONG.—On the 20th ult., at Rodney-street, Liverpool, the wife of James Armstrong, M.B., of a son.

BATEMAN.—On the 27th ult., at Whitchurch, Oxon, the wife of Francis Bateman, M.B., of a son.

LORD.—On the 25th ult., at Wilton House, Landport-terrace, Southsea, the wife of Frederick Lord, L.R.C.P.Ed., L.R.C.S.Ed., of a son.

NICHOLLS.—On the 2nd ult., at Dominica, West Indies, the wife of H. A. Alford Nicholls, M.D., of a daughter.

POIGNAND.—On the 23rd ult., at Upper-street, Islington, the wife of Malcolm Poignand, M.D., of a son.

STEVENSON.—On the 27th ult., at Sandhurst Lodge, Gresham-road, S.W., the wife of Thomas Stevenson, M.D., F.R.C.P., of a daughter.

MARRIAGES.

BRUCE—PARKER.—On the 1st inst., at St. Mark's, Sheffield, the Rev. Canon Bruce, Rector of Carlton, Worksop, to Ann, widow of the late Samuel Parker, F.R.C.S., of Broomgrove Cottage, Sheffield.

GOSS—SLADE.—On the 25th ult., at St. Swithin's Church, Walcot, Bath, Tregenna Biddulph Goss, of Bath, Surgeon, to Almée, daughter of the late Edward Slade, of Calcutta, and adopted daughter of James Slade, of Kensington-place, Bath.

DEATHS.

HILLIARD.—On the 21st ult., at The Vicarage, Tettenhall Wood, near Wolverhampton, George Richard Hilliard, M.R.C.P.L., formerly of Rayleigh and Chelmsford, Essex, in his 81st year.

HUTTON.—On the 27th ult., at 240, City-road, Edith Annie, the dearly-loved child of Robert J. and Kate Hutton, aged 9 months.

NAPIER.—On the 28th ult., suddenly, at George-street, Hanover-square, W., Donald Napier, M.R.C.S.E., aged 50.

RADFORD.—On the 29th ult., at Higher Broughton, Thomas Radford, M.D., F.R.C.P.Ed., aged 83.

N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET OFFICE, June 2nd, 1881.

Date.	Barometer reduced to Sea Level, and 32° F.	Direction of Wind	Dry Bulb	Wet Bulb	Solar Radiation in Vacuo	Max. Temp. Shade	Min. Temp.	Rain fall.	Remarks at 8.30 A.M.
May 27	29·79	N.W.	60	58	78	68	56	·04	Overcast
,, 28	29·89	N.	61	57	99	71	56	..	Cloudy
,, 29	30·01	E.	60	58	88	67	53	·25	Raining
,, 30	30·26	E.	63	56	109	76	46	..	Bright
,, 31	30·40	E.	65	54	110	81	51	..	Fine
June 1	30·19	E.	65	58	110	82	55	..	Hazy
,, 2	30·15	E.	60	60	109	79	54	..	Bright

Medical Diary for the ensuing Week.

Monday, June 6.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.: on Tuesday, 9 A.M.

ROYAL INSTITUTION.—5 P.M. General Monthly Meeting.

Tuesday, June 7.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 3 P.M.

ROYAL INSTITUTION.—3 P.M. Professor H. Morley, "On Thomas Carlyle."

Wednesday, June 8.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.

ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.

ST. MARY'S HOSPITAL.—Operations, 1½ P.M.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1 P.M.

LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.

GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.

ROYAL MICROSCOPICAL SOCIETY.—8 P.M. Professor M. Duncan, "On some Unusual Developments of the Axial Canals of Sponge Spicules and their Meaning."

Thursday, June 9.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—1½ P.M. Surgical Consultations.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M.

NORTH-WEST LONDON HOSPITAL.—Operations, 2½ P.M.

ROYAL INSTITUTION.—3 P.M. Professor C. E. Turner, "On Russian Literature: Tourgenieff.

Friday, June 10.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 2 P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

ROYAL INSTITUTION.—3 P.M. Professor Dewar, "On Origin and Identity of Spectra."

Saturday, June 11.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

ROYAL INSTITUTION.—3 P.M. Professor C. E. Turner, "On Russian Literature: Nekrasoff.

Notes, Short Comments, and Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

Local papers containing reports or news-paragraphs should be marked.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

Lectures, original articles, and reports should be written on one side only of the paper.

We cannot prescribe, or recommend practitioners.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

EXAMINATIONS AT THE ROYAL COLLEGE OF SURGEONS.

THE following are the written questions asked on the 26th ult. at the final examination for the Fellowship:—

1. Describe the anatomy of dermoid cysts, and discuss the question of their mode of origin. In what regions are they usually found, what symptoms do they produce in each region, and what treatment should be adopted?

2. In a case of aneurism at the root of the neck, on the right side, what circumstances would aid you in fixing its seat? What methods of treatment are applicable, and what would influence your selection of each method?

3. Mention the nerve-trunks of the upper extremity which are especially liable to be injured in accidents, and give the symptoms which would result in each if the nerve concerned were completely divided.

4. Describe the various risks encountered by a patient who has undergone the operation of lithotomy; state the best means of their prevention, and the treatment to be adopted in each complication.

There were twenty-seven candidates, of whom ten were rejected. At the corresponding examination last year there were nineteen candidates, of whom eight were rejected.

"TEMPERANCE AND THE DOCTORS."

AN account from the *Western Gazette* has been sent us of a speech delivered by Mr. Alfred Crespi, at Yeovil, on the medical bearings of alcohol. Mr. Crespi's speech was rather an attack on doctors than on drink. He pointed out that doctors were such gentlemen that his own social status had rather been lowered than otherwise by entering the profession, and that medical men sought rather to please their patients than to form an independent judgment, to which indeed, from their low origin in the lower middle class, they were incompetent. We are sorry to have to add that neither the vicar, who presided, nor Dr. Ridge, who followed Mr. Crespi, took exception to these remarks, which seem as ungrateful for all that has been done by the profession for temperance of late years as they are unjust. But the profession must feel thankful to Mr. Crespi for at least abating its lowliness by coming into it and so far lifting it up, and, further, for the light thrown by his speech on the habits of the upper classes with whom he mixed *before* he stooped to enter the medical profession.

St. B. (Belvidere).—The case was reported in THE LANCET of April 9th last.

TIGHT-LACING.

To the Editor of THE LANCET.

SIR,—In 1861, when I was Mr. Skey's house-surgeon, a woman, aged fifty-three, was brought in a state of collapse to St. Bartholomew's Hospital with strangulated femoral hernia on the right side of four days' duration. The protrusion was returned by the usual operation, but the patient died. On examination it was seen that the part strangulated had been the tip of the gall-bladder. The lower part of the thorax was very narrow and so elongated that the end of the last rib touched the crest of the ilium; the liver, deeply furrowed by the ribs, reached far into the iliac fossa; and the gall-bladder, which was filled with gall-stones, protruded nearly four inches beyond the edge of the liver. The patient, her sister told me, had been for many years a noted tight-lacer. I hope this case, in which the gall-bladder was forced out of the abdomen into the thigh by tight-lacing, may help you to expose the dangers of this practice.—I am, Sir, yours, &c.,

May 31st, 1881. HOWARD MARSH.

DRUG-SELLING AND DISPENSING IN BENGAL.

THE amended Municipal Bill for Calcutta, recently passed by the Bengal Legislative Council, deals, amongst other things, with certain abuses which have hitherto existed in the drug trade in that province. Now (says the *Indian Medical Gazette*) mouldy extracts and pill masses, worm-eaten roots and effete tinctures can be seized and confiscated, and vendors punished for attempting to palm off trash on the public instead of physic. Formerly drug-shops were indeed subject to registration, but no conditions were imposed with this object. Any man could open a drug-shop, whether he possessed any knowledge of drugs himself or employed a competent or an incompetent assistant. Now the owner of a drug-shop is compelled to employ a man whose knowledge of drugs has been tested and certified. And no dispensary where European drugs are kept and compounded can be registered unless a qualified compounder is engaged.

Ethnologist.—The "Barnard Davis Collection" was purchased by a special vote of the Council of the Royal College of Surgeons, at an expense of £1000, and has been added to the museum of that College. It contains nearly 2000 specimens, nearly all well authenticated and catalogued.

SILVERLOCK'S MEDICAL REFERENCE BOOK.

To the Editor of THE LANCET.

SIR,—Referring to the notice of the above, we write to inform you that Mr. George Brown did not furnish the list of consultants complained of in your journal. That information was volunteered by a member of the profession at the time when the work, as edited by Mr. George Brown, was in hand, and was then accepted as an addition to the work.

We wish to call attention to the fact (which does not appear to be generally noticed) that the list is made out on a principle, "authors on special subjects only," as notified at the beginning. Whether wisely or not, we do not pretend to have any opinion.

We can only wish the author had made a happier list.

I am, Sir, yours faithfully,

June 1st, 1881. Pro H. SILVERLOCK, C. W. H.

To the Editor of THE LANCET.

SIR,—I shall feel obliged if you will kindly permit me to state that the "List of Consultants," published in Silverlock's Medical Reference Book, was inserted in that work (notwithstanding my name appears on the title-page as editor of the same) without my knowledge or consent. That my name should have been connected with anything so obviously calculated to cause offence to the profession generally has been to me a source of great annoyance.—I am, Sir, yours faithfully,

Gibson-square, Islington, N., May 24th, 1881. GEORGE BROWN.

DESQUAMATION AFTER DRUGS AND AFTER SCARLATINA.

To the Editor of THE LANCET.

SIR,—The observations we have made in this hospital with regard to desquamation may briefly be summarised thus: The more intense the rash, the quicker the peeling of the skin. Very slight cases, when the rash is only visible for a few hours, are usually a long time in completely desquamating, and in many of these cases it is sometimes deferred for some weeks, so that we have occasionally been on the point of discharging a patient when the first signs of desquamation have been discovered. Peeling is usually first seen in the folds of the neck and on the forehead and face, whilst yet the rash is fully out on the lower extremities and body. The last parts to get rid of their old skin are the feet, and particularly the heels. In several cases, with intensely bright scarlet rash and high temperature, the desquamation has been complete in thirty days; the great majority, however, take from sixty to seventy days before we consider them fit for discharge, although they may have been perfectly well for weeks. In many cases it has been extremely doubtful whether, after nine weeks' quarantine, the old thick skin has been completely shed from the heels.

The dead skin from scarlatina patients no doubt carries infection, but there must be some other factor at work sometimes, for on several occasions we have kept patients here for eight weeks, bathing them almost daily. The hair has been cut short, and the head frequently washed with a carbolic acid lotion (one part in twelve). Desquamation has been observed to be complete. New clothes have been brought, the patient taken from a bath, dressed in them, and at once taken home, when it has occurred that children of the same family have caught the fever in something like a week after their relative's return. Desquamation frequently takes place during the progress of enteric fever, but, so far as I have seen, the feet and hands have not peeled except in the cases of labouring men, and this I have observed in the same class when laid up for some time with a fractured leg, or other injury keeping them from their usual work. Out of nine hundred cases of scarlatina I do not remember to have seen one where desquamation at some period or another has not taken place. A young lady is in hospital now who, sixty-four days since, was admitted with slight rash and sore-throat, and from whose feet flakes of dead skin can now be peeled.

I am, Sir, yours, &c.,

Fever Hospital, Bradford, May, 1881. W. R. RIX.

BOY-SMOKERS.

WHATEVER difference of opinion there may be amongst members of the medical profession as to the effects of the moderate use of tobacco by adults, the discussion in our columns at the commencement of the year 1880 of the subject of smoking revealed a pretty general agreement in the conclusion that the employment of the narcotic weed by persons of immature years was wholly and distinctly detrimental. Some time ago a law was passed in Germany to prohibit the use of tobacco by boys under fifteen, either at home or in the streets. Several of the Swiss cantons have now, it is stated, followed the example of their big neighbour, and made it illegal for youths to indulge in the deleterious habit. Half an hour's stroll in the streets of London is sufficient to engender in the peregrinator a wish that something could be done in this country to check the consumption of tobacco by little boys whose mouths are more fitted to receive a stick of barley-sugar than a short black pipe.

DOMESTIC REGISTERS OF HEALTH.

To the Editor of THE LANCET.

SIR,—The prevalence of small-pox, the necessity that exists for re-vaccination, and the uncertain data one derives from persons desirous of knowing whether it is or is not necessary to be revaccinated, lead me to make public a suggestion I have often made in private practice—namely, that parents should provide for their children a record-sheet showing when vaccination and revaccination had been performed, successfully or otherwise, and that this sheet should be amplified by short notes of the illnesses which occur in after-life, verified when practicable by the medical man in attendance.—I am, Sir, yours, &c.,

Regarth-road, May 25th, 1881. CHARLES PRIDHAM.

HYPODERMIC INJECTION OF MORPHIA.

To the Editor of THE LANCET.

SIR,—Will any of your numerous readers kindly inform me how best to ward off the sickness so often following the subcutaneous injection of morphia. I have at present a patient suffering from severe and long-continued intercostal neuralgia, to whom the morphia affords great relief, but distressing sickness invariably comes on soon after its administration, and lasts for several hours. I have tried adding a small quantity of atropine, but this has not been followed by any good results. I will be very much obliged for any information on this point.

I remain, Sir, yours truly,

May 23rd, 1881. J.

"A PRACTICAL PHASE OF THE LUNACY QUESTION."

To the Editor of THE LANCET.

SIR,—Medical officers of asylums will probably not be disposed to find much fault with your article of May 7th (page 749), except with that portion of it which appears to underrate the value of their therapeutic efforts.

You say "there is practically no such thing as treatment now-a-days," but you admit that the patient is placed "under what are deemed to be favourable circumstances, amid pleasant surroundings," that "drugs are given to produce quiet, to relieve pain," &c., and that "the effect of such drugs as come recommended to the notice of the asylum physicians of England, from the Continent and the United States," is investigated. Surely, Sir, this is doing something in the way of treatment. In general medicine, is not the position of our most scientific physicians with regard to drugs (except in the case of some half dozen so-called "specifics,") one of enlightened scepticism, and their mode of treatment in most cases "expectant," endeavouring to remove all obstacles in the way to recovery, and lending a helping hand to the natural powers as occasion may offer?

Again, you say "there is little or nothing personal in the treatment." This may unfortunately be true, to a certain extent, of the "chronic" or "incurable" cases, owing to the vast numbers which have to be dealt with in our public asylums, but as regards the "acute" or "curable" cases it certainly is not the fact. As you say, five per cent. may be taken as the proportion which the curable cases bear to the total number of patients in any given public asylum. On this computation the number of curable cases a superintendent of even the largest asylum could have under his care at any one time would be from forty to sixty, a number to which he is well able to give individual attention, and the observation and treatment of these cases is, to every medical officer worthy of the name, an affair of the deepest interest.

The experiment of establishing lunatic hospitals, to which all curable cases should, in the first instance, be sent, is no doubt worth trying; but from the fact that the best of the existing hospitals do not obtain much better results than good public asylums, when due allowance is made for the different class of patients admitted, it would be well not to be too sanguine in our expectations.

In conclusion, a word with regard to the letter of an "Ex-superintendent" in your last number. He is much exercised on account of the want of professional ability displayed by asylum medical officers, and then goes on to suggest a reform which he admits would necessitate smaller salaries. To be consistent he should advocate the abolition of salaries altogether, then he might succeed in attracting men of even "leading ability" to the study of lunacy. I imagine that the public would be only too delighted if all the public services could be improved in this easy and economical manner.

I am, Sir, your obedient servant,

M.B.

TRAINING SHIPS.

AT the conference of managers of reformatories and industrial schools, held this week at Bristol, Captain Nicholetts, R.N., offered some important observations on training ships. It was not to be expected perhaps that the speaker should make any prominent reference to the hygienic state of those vessels; indeed, he seems to have altogether ignored this branch of the subject. Yet in any complete description of training ships the consideration of their condition from a sanitary point of view must necessarily be included. We have on more than one occasion (see THE LANCET for April 24th and June 5th, 1880) expressed our opinion on this point, and would take the present opportunity of enforcing the need of precautions in the direction indicated in the articles to which we have referred.

Mr. K. G. Ault.—We cannot say. The gentleman may be the holder of a foreign degree.

Messrs. Lambert and Morrison.—The subject is under consideration.

Mr. T. Smith Rowe.—The institutions are numerous. The Classified Directory to the Metropolitan Charities (published by Longmans and Co.) contains a full list of them.

A Physician.—None but a graduate in the degree of "Doctor" can legally call himself by the title.

CONCURRENT VARIOLA AND VACCINIA.

To the Editor of THE LANCET.

SIR,—Under the above heading "In Perplexity" records the early stage of a very interesting case. My note-book furnishes two somewhat analogous, though not such severe cases, which may also interest your readers.

Case 1. On April 8th, 1881, a young lady sickened with small-pox, and on the 12th was removed to a private hospital on account of the family. During the four days she was nursed by her mother. On the 12th the mother was revaccinated successfully in four places; the rooms, bedding, &c., disinfected.—25th: She now sickened.—26th: Temp. 104° F., with a discrete eruption out. Although the vesicles were few, the erythematous blush around each was much larger than I have usually seen in slight cases. The other features were the intense headache from the onset, and all through its course for the next fourteen days. The headache cleared off, and then for the next four days severe facial neuralgia existed. The vesicles crusted about the seventh day, and rapidly fell off. She is small, spare, and not of a particularly nervous temperament. She has made a good recovery.

Case 2. That of a servant girl aged sixteen, strong and robust. A young lady had been removed from the house eight or nine weeks before, had made a good recovery and returned. About a week after her return the girl was revaccinated, and successfully, in three places. Fourteen days after revaccination she sickened with small-pox of an extremely mild type. She made a good recovery. I do not suppose that she contracted the disease from the young lady in any way, as she had been known to have been visiting in an infected district.

I am, Sir, yours, &c.,

May 28th, 1881. L.R.C.P.E. & S.E.

"LICENSING BODIES AND THEIR DIPLOMAS."

To the Editor of THE LANCET.

SIR,—I think a law ought to be passed compelling the assigns of deceased medical men to deliver up the diplomas within a reasonable time after death, so as to prevent the selling of them to others, as I fear it could be easily proved that the diplomas and brass plates of deceased men are used by those who can get hold of them.

I am, Sir, yours faithfully,

May 30th, 1881. G. D. HARDING, M.R.C.S., &c.

THE BITES OF INSECTS.

JUST now, when a sudden, though probably brief, visitation of fine and warm summer weather entails a small plague of flies and insects, it is well to remember that the prompt application of an alkali to the bitten part allays the irritation and commonly at once relieves the suffering consequent on a class of injuries which, though small, are often exceedingly annoying and even troublesome, especially in the case of children and persons with sensitive skins. Soda and ammonia will answer the purpose.

UTERINE DILATORS.

To the Editor of THE LANCET.

SIR,—With reference to the letter from Messrs. Mayer and Meltzer (in THE LANCET of Saturday last), into which they import the name of my friend and senior colleague, Dr. Chambers, I am enabled to state on his authority that he did not obtain the uterine dilator from that firm until after I had shown a working example of my own instrument at the Chelsea Hospital for Women by Messrs. Maw, Son, and Thompson. *Suum cuique.*—I am, Sir, your obedient servant,

Thurloe-square, S.W., May 23rd, 1881. JOHN JAMES, M.B. Lond.

"THE BLOOD OF SAINT JANUARIUS."

To the Editor of THE LANCET.

SIR,—In your last issue Mr. A. Clarence Foster asks if this miracle has ever been submitted to the ordeal of unbiased scientific inquiry. In reply I beg to say that the ecclesiastical authorities at Naples have preserved a document from Sir Humphry Davy, asserting that he knew of nothing in chemistry or nature which could account for what he had witnessed. He was present at the "miracle" in 1818, when he went to examine the manuscripts of Herculaneum. Your correspondent will find more information on this subject in the "Manchester Dialogues," first series, by the Rev. Thomas Harper, of Stoneyhurst College (London: Burns and Oates, Portman-street, W.).—I am, Sir, yours obediently,

May 28th, 1881. F. E. C.

THE NATIONAL VACCINE ESTABLISHMENT AND ITS LYMPH.

To the Editor of THE LANCET.

SIR,—I have noticed a letter in your last issue drawing attention to the frequent uselessness of the lymph supplied by the National Vaccine Establishment. My father, who is a public vaccinator, has usually made the same complaint; indeed he resorts to the National Vaccine Establishment as little as possible, and never with any confidence.

I am, Sir, yours, &c.,

May 17th, 1881. A READER OF THE LANCET.

To the Editor of THE LANCET.

SIR,—In answer to "A Public Vaccinator," I beg to state that I have been disappointed in every case that I have vaccinated with the lymph supplied by the National Vaccine Establishment. This has on one occasion caused much inconvenience and delay, as I had to procure better lymph from the wholesale chemists that I deal with.

I am, Sir, yours, &c.,

May, 1881. ANOTHER PUBLIC VACCINATOR.

To the Editor of THE LANCET.

SIR,—I lately obtained a supply of vaccine from the above establishment with which I vaccinated three adults, two of whom succeeded admirably, and one failed, this latter due no doubt to insusceptibility on the part of the patient.—I am, Sir, yours faithfully,

London, May 28th, 1881. T. d'O. PARTRIDGE.

To the Editor of THE LANCET.

SIR,—During the last twenty years I have been supplied with lymph from the above-named institution upon certainly more than one hundred occasions, and have always found it efficacious. Several of my medical friends have been supplied in the same way, and upon no occasion have I heard them complain.—I am, Sir, your obedient servant,

Stockwell-road, S.W., May 28th, 1881. R. H. S. CARPENTER.

To the Editor of THE LANCET.

SIR,—During the last four years I have had occasion to apply to the National Vaccine Establishment for lymph about eight times, and I think it only just to that establishment to state that in every case the lymph has proved highly satisfactory, never having had a failure through it.

I am, Sir, yours, &c.,

May 28th, 1881. A GENERAL PRACTITIONER.

To the Editor of THE LANCET.

SIR,—I have been a public vaccinator for the last twenty years, and nearly always been furnished twice a year with a couple of tubes of lymph from the above institution to begin vaccinating with, during which period I can only recall to mind one or two failures, so think my testimony is of some value as to the quality of the lymph supplied to applicants.

I am, Sir, yours, &c.,

May, 1881. A PUBLIC VACCINATOR.

Mr. Richard B. Searle goes a little too far in claiming for those holding qualifications from Colleges of Physicians that they never forget what is due to the dignity of the profession. He errs, too, in a legal respect in saying that the possession of the degree of M.D. only conveys an honorary distinction. It empowers its possessor to recover charges for medical services just as well as does the Licence of a College of Physicians.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Lithgow, London; Mr. Partridge, London; Dr. Barrs, Leeds; Mr. Colston, New Whittington; Mr. W. H. Smith, London; Mr. W. B. Rowe, Bristol; Dr. Rayner, Hanwell; Mr. Lawson Tait, Birmingham; Mr. Howard Marsh; Surgeon-Major Jeffcoat, Chatham; Dr. Spender, Bath; Dr. Hooper, London; Mr. Kingsett, Tottenham; Dr. Swift Walker, Hanley; Mr. Scott, London; Fleet-Surgeon Keelan, Falmouth; Mr. Garman, Wednesbury; Dr. Barnardo, London; Mr. Doyle, Edinburgh; Dr. J. W. Taylor; Mr. Alfred Bethell, Bridgnorth; Dr. Bindley, London; Mr. Cowell, London; Messrs. Southall, Son, and Barclay, Birmingham; Mr. F. Fox; Fleet-Surgeon Hayne, Woolwich; Dr. R. J. Lee, London; Dr. Anningson, Cambridge; Messrs. Brady and Martin, Newcastle-on-Tyne; Mr. R. H. S. Carpenter; Mr. Crerar; Dr. E. Haughton, Norwood; Messrs. Macniven and Cameron, Edinburgh; Mr. Cairns, Wakefield; Mr. Allsop, Manchester; Mr. McLaren, Larbert; Mr. Pentland, Leominster; Mr. Ridges, Wolverhampton; Mr. Fraunel, Clifton; Mr. Williams, Oxford; Messrs. Lambert and Morrison, London; Dr. Hughes, Llanberis; Mr. Harding, London; Mr. Maggs, London; Mr. Trennery, Bristol; Mr. Shirley Deakin, Allahabad; Mrs. Mawer, Bucharest; Dr. Ridge, London; Mr. Ault; Dr. J. K. Fowler, London; Mr. R. B. Smith; Dr. Phillips, Exeter; Mr. Shirley Murphy, London; Mr. A. B. R. Myers; Dr. Rayner, Great Malvern; Mr. Flinn, Brownhills; Mr. J. White, London; Mr. Silk, Gravesend; Mr. Glencross, Bourn; Dr. Macnaughton Jones, Cork; Mr. J. M. Fox, Lymm; Mr. J. Byrne, London; Mr. Kelsall, Ashton-under-Lyne; Mrs. Jackson, Sheffield; Mr. Kimpton, London; Mr. Deacon, Knighton; Mr. Whitton, Towcester; Dr. Alessandri, Tuscany; Mr. W. J. Brown, Chester-le-street; Messrs. Lloyd and Co., London; Mr. Wood, London; Dr. Strahan, Beverley; Dr. Seaton; Messrs. Roberts and Schrader, London; Dr. Johnstone, Leicester; Dr. Loughnan; Messrs. Silverlock; Mr. Collins, Paignton; M. R. Z. S.; W., Southgate; Fidelis; Medico; Appetitus Rationi Parent; F. E. C.; M.R.C.S.; A General Practitioner; Veritas; A Cambridge Undergraduate; &c., &c.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. White, London; Mr. Hodgkinson, London; Dr. Tipley, Brigg; Mr. Willey, Birmingham; Messrs. Harvey and Reynolds, Leeds; Messrs. Drake, Stratford; Mr. Dora, Sherborne; Mr. Tomson, Luton; Dr. Colmer, Yeovil; Messrs. Richardson and Co., Leicester; Mrs. Rahn, Ipswich; Mr. Ellis, Newcastle; Mr. Kinder, Leamington; Messrs. Cuttler and Davis, Worcester; Dr. Hebblethwaithe, Leicester; Mrs. Baxter, Glasgow; Mr. King, Stratton; Mr. Bond, Brill; Mr. Blades, Exeter; Alpha; R. B. K., Walham-green; A. B. C., Eastbourne; K. C., Whitstable; M.R.C.S., Grantham; H. C. H.; P. J. F.; Medico; A. D., Liverpool; Chirurgus; T., Peckham; L. B., Luton; A. B., Stamford-hill; Priory; A. R., Plymouth; W. S., Birmingham; E., Edinburgh; Alpha, London; Medicus, Maryport; Medicus, Minchinhampton; L. M., Leeds; M. D. T. P.; Medico, Ballantray; D. V., Manchester; &c., &c.

Italian Times, West Cumberland Times, Carlisle Patriot, Indian Weekly Mail, Anti-Vivisectionist, Soulby's Universal Advertiser, Nottingham Daily Express, Cornish Telegraph, Indian Medical Gazette, Perthshire Constitution, Annual World, Nottingham Daily Guardian, &c., have been received.

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Agent for the Advertising Department in France—J. ASTIER, 67, Rue Caumartin, Paris.